

OLD!
THE ESSENTIAL GUID CLASSIC GAMES
retro GAMER
AMSTRAD | COMMODORE | GEO | SO | COIN-OP | MOBILE
ANNIVERSA
GAME BOY CELEBRATED
FROM TETRIS TO POKÉMON: A MONOCHROME MASTERPIECE
25 YEARS
Nintendo GAME BOY
THE MAKING OF
GOLDEN AXE
HOW THE WORK OF TOLKIEN INSPIRED A 25-YEAR-OLD ARCADE EPIC
CHEATING NEVER PROSPERS
FROM POKES TO GAME GENIE: THE RISE AND FALL OF VIDEOGAME CHEATS
FROM THE ARCHIVES
LORE DESIGN
BEHIND THE SCENES OF THE CULT SOFTWARE HOUSE
25 SATURN GAMES
READERS REVEAL THEIR FAVOURITE GAMES ON SEGA'S 32-BIT CONSOLE
BACK TO THE 80s
DAVID BRABEN REVISITS ZARCH
SCROLLING BEAT-'EM-UPS
TEKKEN AT 20
DigitalEdition
GreatDigitalMags.com
ISSUE 128
IMAGINE PUBLISHING

THE RETROBATES

FAVOURITE SCROLLING BEAT-'EM-UPS



DARRAN JONES

Dungeons & Dragons: Shadow Of Mystara channels the spirit of *D&D* and let's me hit things with ridiculously oversized weapons. It's ace.

Expertise:
Juggling a beautiful wife, two gorgeous girls and an award-winning magazine

Currently playing:
Titanfall! Titanfall! Titanfall!

Favourite game of all time:
Strider



NICK THORPE

Die Hard Arcade, thanks to the strange sense of humour. Wrestling moves, over the top weapons and punks falling into bins? Love it.

Expertise:
Owning seven Master Systems

Currently playing:
South Park: The Stick Of Truth

Favourite game of all time:
Sonic The Hedgehog



PAUL DRURY

Golden Axe with mates in the arcade, seeing who could boot those potion-stealing sprites the most. And yes of course I was always Tyris Flare…

Expertise:
Mincing like Harry Tipper

Currently playing:
Fez

Favourite game of all time:
Sheep In Space



STEVE HOLMES

Golden Axe for me. Not just because it's on the cover, mind.

Expertise:
Needless sarcasm

Currently playing:
inFamous: Second Son

Favourite game of all time:
The Legend Of Zelda: Ocarina Of Time



JONATHAN WELLS

Teenage Mutant Ninja Turtles 2 for the NES, First game I ever had and still own it today.

Expertise:
Tackling dirty nappies and retro spreads

Currently playing:
Titanfall

Favourite game of all time:
The Secret Of Monkey Island



DAVID CROOKES

Double Dragon. Often it's about memories and I have great ones with friends playing this.

Expertise:
Amstrad, Lynx, adventures, *Dizzy* and PlayStation (but is that retro? Debate!)

Currently playing:
Broken Sword 5: The Serpent's Curse

Favourite game of all time:
Broken Sword



PAUL DAVIES

Streets Of Rage! I could not believe the music! Played this over, and over and over. All praise SEGA.

Expertise:
Coming second

Currently playing:
Bravely Default

Favourite game of all time:
Ghouls 'N Ghosts



JASON KELK

I'm not really a fan of scrolling beat-'em-ups, but I did play *Streets Of Rage* for the soundtrack occasionally.

Expertise:
Making things up on the fly

Currently playing:
Subterranea (C64)

Favourite game of all time:
Io

LOADING...



My fondest memories of *Golden Axe* came not upon its release, but when I worked at Tesco. The staff canteen had an arcade machine, with a selection of JAMMA boards that were routinely rotated by a local operator.

I had a regular competition with the awesomely named Brady Kent, where we'd compete on each game, and he'd inevitably beat me. *Golden Axe* was my chance to shine, as I knew he'd finally met his match. Unbeknownst to Brady, I pretty much lived and breathed Sega's game the previous year when it was in my local arcade and I could easily one credit it. Brady didn't know this however, so we set up our usual rules and got to work. I thrashed him. I'd come in each day to see if my high score still held (it stayed on for the night team to play it) and would then use the rest of my day boasting about my skills (hey, I was a 17-year-old punk).

I turned up one Saturday to see Chris Dale playing, which was strange, because he never played games. And yet there he was on the final stage. Which is when I noticed that he still had all his lives. And energy…

Chris taught me an important lesson that day. No matter how good you think you are, there's always someone better just around the corner.

Enjoy the magazine,



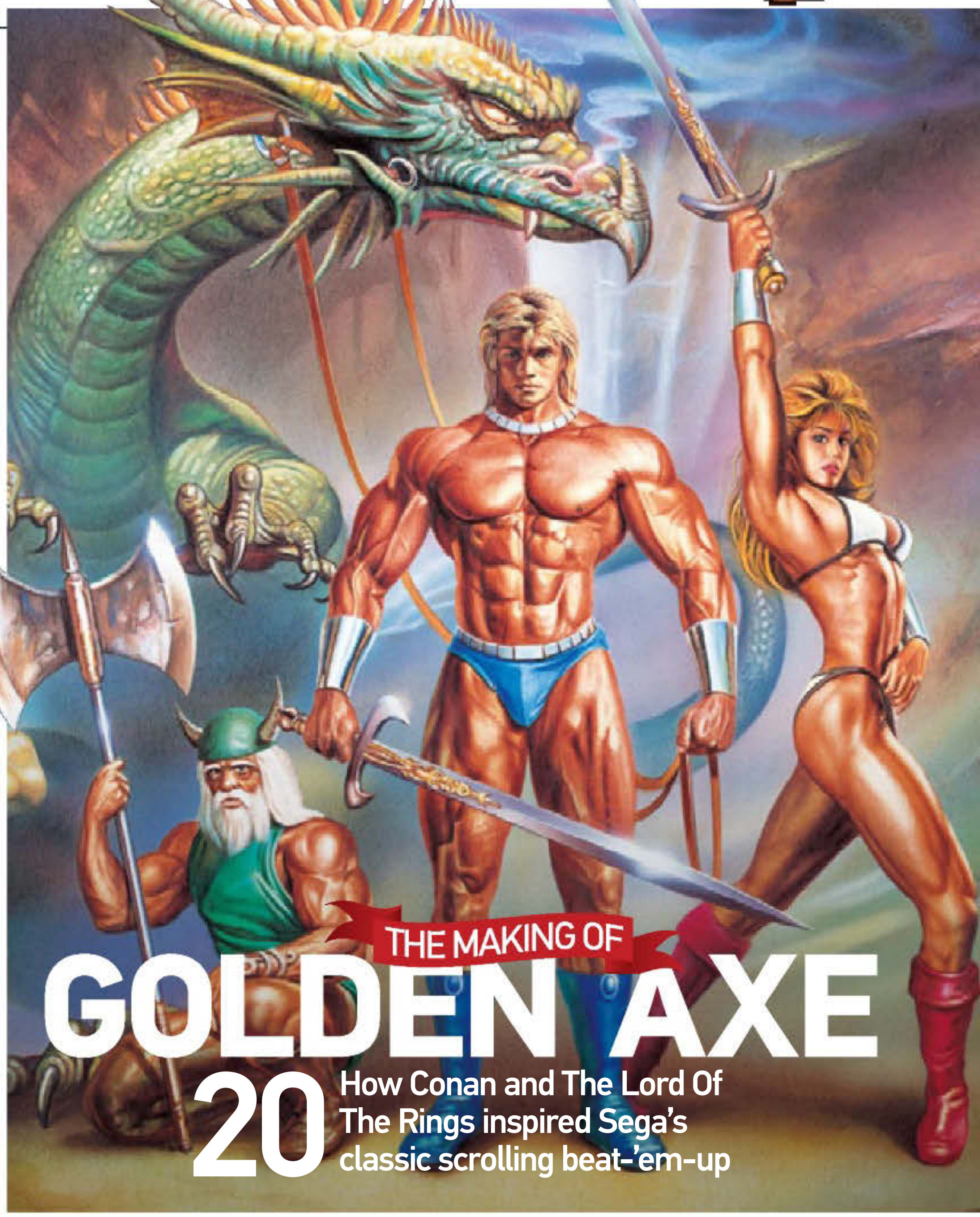
CONTENTS

>> Load 128 Breathing new life into classic games



FEATURED





RETRO REVIVALS

In the hot seat this month…





imagineshop.co.uk

You can now order **Retro Gamer** and any of your other favourite Imagine titles from our online eShop. Don't delay, make sure you get your order today.

Head over to **www.imagineshop.co.uk**



subscribe here!

AND SAVE 30%

Don't miss this golden opportunity

Subscribe at **www.imaginesubs.co.uk**



"These are characters that you care about" Darran Jones



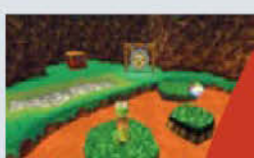






retro GAMER.net READER'S REVIVAL





ESSENTIALS

RETRO RATED



NEW LOOK SITE!

Get online now!

Visit the **Retro Gamer** website and upload your very own classic profiles

www.retrogamer.net



retro radar

GIVE US TWO MINUTES AND WE'LL GIVE YOU THE RETRO WORLD



>> This month sees the start of another Kickstarter campaign by none other than Julian Gollop. After preliminary work on his Chaos update the strategy king is now hoping it will be enough to secure funding on the popular crowdfunding site

CONTENTS

CHAOS RISING

HOW JULIAN GOLLOP PLANS TO REVITALISE THE STRATEGY GENRE

On 4 November 2012 Julian Gollop revealed on his personal blog that he was working on an update of his popular Spectrum game *Chaos*. Enough time has now passed for Julian to reveal the next stage of his project, to release the game on popular crowdfunding site Kickstarter. We caught up with Julian to find out what's happened over the last year of development and what he hopes to achieve with his new game.

Was it always your plan to move *Chaos Reborn* onto Kickstarter for funding?

Yes, I have been looking at Kickstarter for quite a while. I guess it really shot to prominence as a funding platform for games with the *Double Fine Adventure* project. It is a great place to connect with players who are interested in a particular genre or franchise, which has been neglected by the major publishers.

What new mechanics have you added and how will they build on the original Spectrum game?

There are a lot of new features in *Chaos Reborn* compared to the original *Chaos*. I decided to keep the core mechanics the same because they just work beautifully, so *Chaos Reborn* is built on that foundation – with spell casting chances, creature illusions and the disbelieve spell, and the balance between Law and Chaos. The arena is quite different though. The new game will have different environment types with terrain elevation and interactive elements such as chests and shrines. These maps will be procedurally generated based on the general environment type – forest, mountains, swamp, city, ruins, caves and so on. The major addition to the game system is the massive Realms of Chaos mode. This is an RPG system, which allows you to develop your wizard and his spell knowledge by exploring Realms, fighting Wizard Lords and ultimately defeating the Wizard King to win treasures and highly prized artefacts. You can also equip your wizard with staffs, robes and hats, which have magical properties and special powers, which can be found in these realms. There will also be extensive multiplayer and co-op modes.

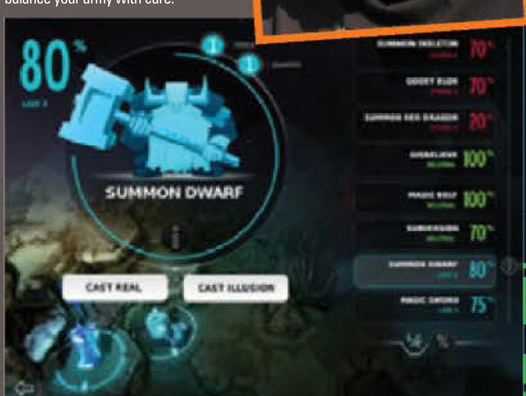
Tell us about the procedurally generated maps.

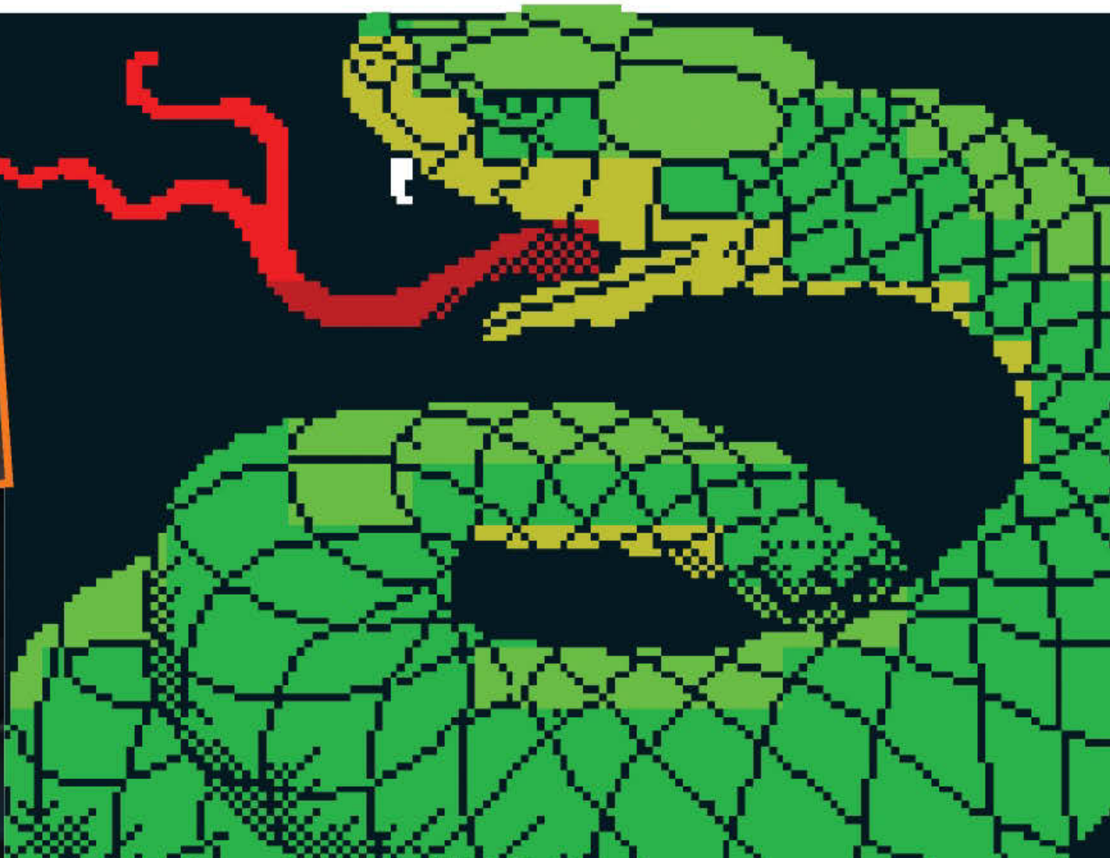
Taking advantage of the terrain is a key part of the tactics, so the first



» Julian is pleased with the way *Chaos Reborn* is progressing. Here's hoping the Kickstarter is a success.

» [PC] Law and Chaos feature heavily in the game, so you'll need to balance your army with care.







» [PC] *Chaos Reborn* is already in playable form. The current visuals are placeholders, but we actually like the look of it.


» [Spectrum] The original Spectrum releases remains amazingly playable.

thing you need to do on entering the arena is assess what spells are going to work best within the environment. For example, the eagle is a flying creature that benefits from a 'swoop' ability, which boosts its Attack Value when attacking from higher ground. So if the map generator has created isolated high plateaus this would be ideal terrain for deploying eagles. The procedural generation system uses clever algorithms that guarantee a huge variety of layouts, so it adds to the uniqueness of each battle.

How are you finding the move back to smaller teams?
It's great, because everyone is focused and the whole team shares the vision to make an exceptional strategy RPG. There is no interference from higher powers, but instead a more direct relationship with our backers and fans of the original *Chaos*.

Does it create a better working environment for you?
Yes, because I get to spend more time on game design and coding and I can work when I want. As both a producer and game designer at Ubisoft there were a lot of management issues and planning to deal with day-to-day, which is minimised now.

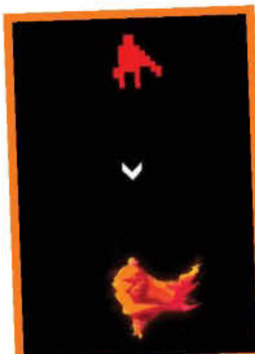
How hard has it been creating a contemporary game that stays true to the original's look and design?
I want *Chaos Reborn* to be instantly recognisable to players of the original *Chaos*, while at the same time building on it and bringing the presentation up to date. The core mechanics will remain instantly familiar, but with a much more informative and user-friendly interface. The main difference in the look is that the plain black background has been replaced with detailed terrain. However, I want the creatures to stand out and retain a bold, virtually monochromatic look, which is reminiscent of the original game with its animated single-colour sprites. This is still work in progress, but I think we will achieve a distinctive and attractive style.

What's the most difficult thing you face when creating a strategy game like *Chaos Reborn*?
I think there is a fundamental challenge with any strategy game, and that is to make the game accessible – that is, easily learned with understandable mechanics and a usable interface – but at the same time to have depth and lasting appeal. Turn-based strategy games have traditionally had a bit of a reputation for being complex and difficult to learn – and they haven't been very popular for multiplayer gaming either. So I want *Chaos Reborn* to be a fast playing, dynamic game with interesting and significant decisions to make every turn. The original *Chaos* is a great base to start from because it succeeded as a multiplayer game that worked well with up to eight players. Another big challenge with *Chaos Reborn* is that it has a lot of multiplayer and social features. There will be guilds, co-op game play in Realms and in multiplayer, plus a number of competitive multiplayer modes. There is a lot of server-side programming required, which will be a real challenge, but ultimately will make *Chaos Reborn* a great game.

Are you pleased that the revived *XCOM* has helped reignite interest in the genre?
Absolutely. Firaxis did a terrific job with the *XCOM* reboot, and made the turn-based strategy genre a viable, commercial proposition once more. I still think that there is considerable room for innovation and improvement with future turn-based [strategy] games.

Some Kickstarter-funded projects have recently received backlash, how do you attempt to avoid situations like this?
The key thing is to deliver fun and engaging gameplay from the very first playable release made available to backers, even if there is only a small subset of features implemented. We already have a playable prototype which is proving good fun to play, so I think we will be able to match the expectations of our backers.

What will you do if you're unable to secure funding?
It may slow us down for a while, but it won't stop us completely. I will look for ways to get the game made according to my original vision. *


» The *Chaos Reborn* team is hard at work to ensure the new monsters are as authentic as possible. Here's the vampire in its new and old incarnations.


» You'll have the option to accessorise your wizard with equipment. Kickstarter backers will gain access to exclusive kit.

Creatures Of Chaos

» Just a few of the beasties you can expect to battle in Chaos Reborn

MANTICORE
FIRST SEEN IN: CHAOS
■ This monster is based on the version found in *Magic And Mayhem*, but has more spikes on its tail.



PHOENIX
FIRST SEEN IN: CHAOS REBORN
■ This legendary mythical bird is able to resurrect several turns after being killed. It's handily immune to fire.



GIANT SPIDER
FIRST SEEN IN: LORDS OF CHAOS
■ The giant spider's web attacks will cause mobility problems. You'll have to attack the web to break free.

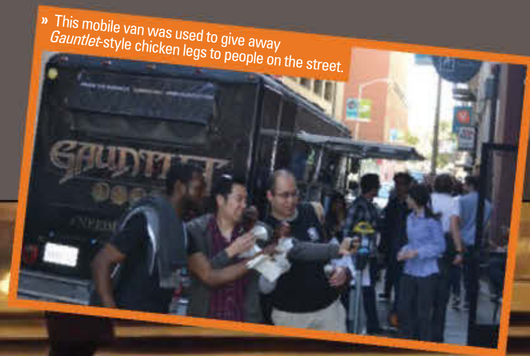


DWARF
FIRST SEEN IN: CHAOS REBORN
■ It wouldn't be fantasy without having dwarves to battle. Expect these small creatures to hit incredibly hard.



GIANT SCORPION
FIRST SEEN IN: CHAOS REBORN
■ Although Julian is resurrecting many of the monsters from *Chaos*, some, like this scorpion, will be brand new.





» This mobile van was used to give away *Gauntlet*-style chicken legs to people on the street.



» [PC] Warner Bros is promising the resurrection of more classic franchises, via its new Vault service.

» [PC] The camera is being wisely scaled back so it will play like the arcade original.

RUNNING THE GAUNTLET

AXEL LINDBERG DISCUSSES WARNER BROS' NEW GAUNTLET REBOOT

Axel Lindberg of Arrowhead Games Studios tells us "It's a huge honour", when we ask him what it's like to be in charge of Warner Bros' new *Gauntlet* reboot. "The 1985 arcade version of *Gauntlet* is *the* original multiplayer dungeon crawler, and one of the first games we played as kids. It is also the game that introduced many of us to the concept of competitive co-op multiplayer. Our approach has been to create a *Gauntlet* that holds true to our romanticised memory of the original game – which we hope holds true for all the other *Gauntlet* fans out there."

It's an approach that so far appears to be working, with plenty of neat little touches like special powers and magical items that add to the core gameplay of the arcade original.

"While we want to stay true to the original as much as possible, we also want to make sure that *Gauntlet* holds up to the expectations of gamers today," continues Axel. "We have completely redesigned the health system, as the original health system was designed for an 'insert coin' arcade cabinet. We still flirt with this by having the gold you collect in the dungeons being integrated into the way death is handled. We have also added a new feature called Relics. Relics are magical items that the players earn as they play through the dungeon, which bestow new abilities to their characters, such as boosting movement speed and freezing enemies in an area around you."

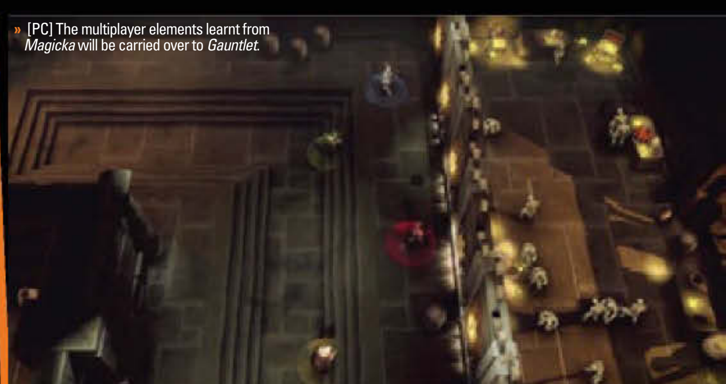
Multiplayer remains a big focus, which is how Arrowhead probably got the gig, as it has great experience in the area thanks to PC hit *Magicka*. "*Magicka* was a great experience in all areas of development," admits Axel. "It influences everything from multiplayer design to character dialogues. The most obvious advantage is on the technical side of things; what requirements online networking has on the mechanics of the game, and what pitfalls to watch out for that can cause issues with stability further down the line."

Oh and those worried that the four classic characters from the original game will be turned into bland identikit heroes have nothing to fear, as Axel is well aware that there are some things you simply shouldn't change. "One of the coolest features that the 1985 version pioneered was that each of the four player characters had a unique play-style with individual strengths and weaknesses," he continues. "This is something we feel is a key part of the *Gauntlet* experience! Nowadays, it is a very commonplace feature in games – so to make sure this sense of uniqueness is still a major part of the experience, we have pushed it even further. In fact, each of the heroes in this *Gauntlet* even has slightly different controller schemes to enforce this."

After the disappointing cancellation of *Gauntlet* DS it's great to see the franchise getting another crack of the whip. We've always had massively fond memories of Atari game and it would appear that the same is true for Axel who has his own theories on *Gauntlet*'s enduring appeal. "*Gauntlet* was one of the first games that invited people to play together in a way that caused a lot of drama between players, but in a fun way. It was one of the first games where the social interaction between players became a meaningful and very real part of the actual gameplay. Maybe the nostalgia is so strong because the memories are about something more than just the game; maybe it is about having good times with friends a long time ago."



» Axel has big plans for *Gauntlet's* reboot.



» [PC] The multiplayer elements learnt from *Magicka* will be carried over to *Gauntlet*.



IS THAT IT?

DISAPPOINTMENT RISES AS CAPCOM ANNOUNCES FINAL STREET FIGHTER IV CHARACTER

When Capcom announced yet another edition of *Street Fighter IV*, it revealed that five new characters would join the fray, one of which had never been in the series before as a playable character. In the following months it revealed Hugo, Poison Ivy, Rolento and Elenda, but kept that final character carefully under wraps. She's finally been revealed as Decapre, a member of M Bison's Dolls unit, who appears to be a re-skinned version of Cammy. To be fair, she's a charge character, which should help ensure she plays a little differently to the classic female fighter, but we can't help feel disappointed. We'd have happily settled for the return of Karin. Expect a review of *Ultra Street Fighter IV* in a later issue when we'll put all five fighters through their paces.

MOST EXCITED ABOUT OLLIOLLI

Roll7's fantastic 2D tribute to the *Tony Hawk's* games of old is heading to PS4, PS3, PC, Mac and Linux. There's goes our social life.



SHEN-WHO?



SEGA LOSES SHENMUE TRADEMARK

The Internet exploded recently when it was revealed that Sega has lost the American trademark to *Shenmue* due to inactivity. It's worth noting that Sega still owns the IP, but it's nevertheless sent fans into a frenzy, particularly after Yu Suzuki's Making Of Shenmue seminar at this year's Game Developer Conference and once again suggested that he would like to make *Shenmue III*. Eurogamer even recently reported that he'd be keen to launch *Shenmue III* on Kickstarter, which again caused the *Shenmue III* hype machine to resurrect from its barely slept in grave for what feels like the 15th time now. We'd love to see a *Shenmue III* as much as everyone else, but Sega clearly isn't in a hurry to release it just yet.

KILLER INSTINCT REVIVED

MICROSOFT'S POPULAR FIGHTER TO GET NEW DEVELOPER



Double Helix Games was still finishing off the content for the first season of *Killer Instinct* when it revealed it had been purchased by Amazon. As a result Microsoft has drafted in Iron Galaxy Studios to continue the work Double Helix started. While the studio has been reluctant to reveal what will appear in *Killer Instinct*'s second season of content, it recently explained to Polygon that it has been working closely with Double Helix to ensure that the transition goes as smoothly as possible.

Iron Galaxy Studios has quickly built up a reputation for its excellent ports of fighters such as *Street Fighter III 3rd Strike: Fight For The Future*, *Darkstalkers Resurrection* and its original fighter *Divekick*, making it the perfect choice for the recently resurrected franchise. Expect more news on additional characters as we get it.

CLASSIC SEGA RACERS RETURN

CRAZY TAXI AND OUTRUN GET HANDHELD UPDATES

Sega recently revealed that *Crazy Taxi* and *OutRun* are heading to various handheld formats in the near future. The biggest news is that a brand new *Crazy Taxi* game is in development. Overseen by original creator Kenji Kanno, it's already causing outrage from certain quarters, as it will be released on iOS and Android.

It's essentially a variation of the endless runner, but will incorporate various customisation options and challenges, with players using their fingers to swipe into new lanes or powerslide around corners. While it's a pity we're not getting a more conventional game, Sega has shown enough understanding of the iOS market for us to not be afraid of it turning into a cash guzzler.

Sega's other news this month is its plan to release a 3D *OutRun* for Nintendo's 3DS. While it's not yet announced which version of the game it will be, we've no reason to not expect a port of the original arcade game. Developer M2 has already delivered some fantastic 3D conversions in recent months, so we're greatly looking forward to the eventual release. You can expect to see reviews of both games in **RG** in the near future.



THE VAULT

THE COOL RETRO STUFF THAT WE'VE HAD OUR EYE ON THIS MONTH

Arcade Nano Portable Games Console – Virtua Fighter 2 Edition

It was highly unlikely that anyone was going to cram the original *Virtua Fighter 2* into such a tiny device, so here's the best alternative. The Nano is an absolutely tiny little plug and play device that features the Mega Drive version of the classic brawler as well as *Golden Axe I* and *III*, *Alien Storm*, *Shinobi III* and five other games. The sound emulation isn't perfect and it's single-player only, but it should keep the kids entertained.

Price: £13.69
From: www.funstock.co.uk



Space Invaders Sliding Puzzle

What could be more fun than destroying *Space Invaders*? Disassembling them of course. Okay, so the idea of this sliding puzzle game is to recreate an iconic scene from the classic videogame, but we think it's far more fun to take that scene and then destroy every pesky invader by ripping them apart with your fingers.

Price: £5.79
From: www.amazon.co.uk



Space Invaders Bottle Opener

More *Space Invaders* shenanigans, this time in the form of a large novelty bottle opener. Finished off in a fetching lime green, it's another official product from Taito, and proves that Pac-Man isn't the only arcade icon who is drawn to merchandise like a moth to a flame. Now all we need to do is find a really old bottle of Bud to create that true retro feel.

Price: £6.99
From: www.funstock.co.uk



Super Nintendo Everdrive

As more and more gamers experiment with homebrew games, devices like the Everdrive are becoming increasingly popular. While Funstock creates Everdrives for a number of different systems, the one we've been experimenting with is for the Super Nintendo. The interface can be a little tricky to navigate and the menu system needs work, but it's otherwise a nifty little device that supports both PAL and NTSC systems has an optional USB port (handy if you're a homebrew developer) and plenty of storage space.

Price: £69.99
From: www.funstock.co.uk



Retro Gamer Coasters

Erase annoying drink rings and get a blast of nostalgia at the same time with our awesome coasters. Available in packs of four, this tough durable coasters feature some of the best **Retro Gamer** covers we've ever produced, making them perfect for your loved ones.

Price: £4.99
From: www.imagineshop.co.uk



PICK OF THE MONTH

Sega Classics Collection

You've seen how amazing our new cover looks. Now imagine if you could go into your local newsagent and buy that issue while wearing that very same image as a piece of cool clothing. That's exactly what you can do thanks to this collaboration between Sega and Drop Dead. Made from 100 per cent cotton, the *Golden Axe* sweater has been created using a unique dying process that makes its appearance change after washing. Extremely comfortable (according to **NowGamer**'s Ryan King) its sleeves are adorned with *Golden Axe* and Drop Dead logos, while it sports little holes to create a worn appearance. If *Golden Axe* isn't to your liking, Drop Dead also does a *Streets Of Rage* vest for £30 and a beautiful *Ecco The Dolphin* blue tie-dye t-shirt for £35.

Price: £30-£45
From: www.dropdead.co



retrocolumns

PAUL DAVIES GIVES HIS VIEWS ON THE RETRO WORLD

Here's my bio…

In 1992 I started out on *Mean Machines Sega* and *Nintendo Magazine System*. In 1995 I became editor of *C&VG*. I led the *C&VG* website from 1998 until Christmas 2000, then I left journalism to be concept design manager at Criterion Games. I returned to journalism in 2002 and from 2005 I've been running my own company, Unlikely Hero.

One was never enough

Hello, retro gamers. My name is **Paul Davies**. I used to be the editor of C&VG and have also worked on a number of classic gaming magazines over the years



During a time when computer and videogames carried a genuine 'Gosh!' factor, the appeal of Nintendo's greatest ever marvel was strangely workaday… as essential as a decent kettle. Thinking about it now, videogames were an add-on to my hopeless unemployable heavy metal lifestyle in the late Eighties. They needed Setting Up and Making Proper Time For within the confines of my parents' home – all very ceremonious and probably a bit worrying and mysterious.

With Game Boy, though, its role as an attractive and always accessible play thing was instantaneous to everyone at home, including my younger brother who got hooked on *Tetris*. Completely out of character, although he did dabble with Game & Watch *Fire* back in the day. We ended up buying another Game Boy for general family access to mainly *Tetris* and whatever else I brought home.

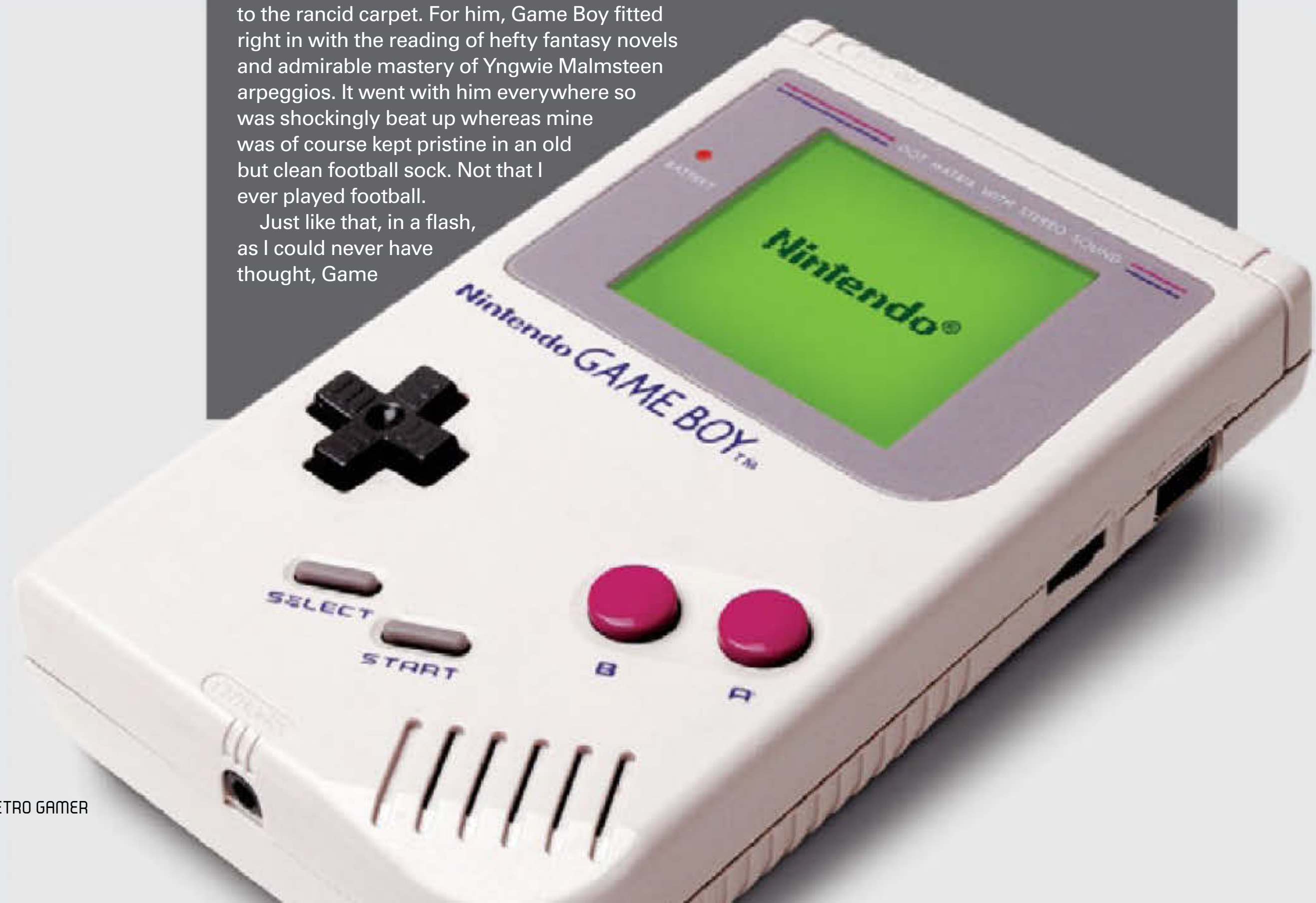
Game Boy plus *Tetris* surprised the snobbish games connoisseur side of me that had grown worse with my beloved Mega Drive. A friend of mine had been playing *Tetris* in the local pub and had been banging on about it, saying it was All The Rage among his other friends (who were obviously smarter than me by implication). Anyhow, my mate was amazing at that stupid coloured-block-puzzle coin-op that kept drinkers glued to the screen while their Doc Martens stuck to the rancid carpet. For him, Game Boy fitted right in with the reading of hefty fantasy novels and admirable mastery of Yngwie Malmsteen arpeggios. It went with him everywhere so was shockingly beat up whereas mine was of course kept pristine in an old but clean football sock. Not that I ever played football.

Just like that, in a flash, as I could never have thought, Game Boy brought gaming to the masses. They still weren't interested in *Golden Axe*, *Thunderforce II* or *Super Shinobi*, but I allowed myself to feel smug about it. Heh, a game has grabbed you too huh? You know now why I cry.

Of course this had the adverse effect of causing even more puzzlement at my chosen profession a year or so later: "You play games [imagines *Tetris*] and write about them for a living? Well…"

As for my approach to the growing catalogue of blurry experiences that came on adorable little cartridges – oops, Game Paks – I pursued the impossible under the instruction of *C&VG*, *Zero*, *Total* and *Mean Machines*. I tried really hard to complete *Battletoads* for example, an effort comparable to the 'Mile High Club' achievement in *Call Of Duty 4*. I never played *F-1 Race* though. *F-1 Race* and its four-player link-cable speciality held no practical appeal even to a gaming obsessed moron like me.

Then came *Pokémon*, shortly accompanied by Game Boy Pocket with its superior screen quality and range of funky coloured cases. Game Boy leaped from a side-order to the main dish for millions of gamers and millions more kids to keep quiet. I was a 20-something bloke cursing at the gates of Victory Road while on the train alongside a bemused girlfriend (who amazingly agreed to be my wife). At this point I'm only going to say The Rest Is History, because after Pikachu and the gang grabbed the world's attention, Game Boy must've paid half my bills for a long, long time! *



25 April – 22 May

retrodiary

>> A month of retro events both past and present



28 April 1980
■ Nintendo released its first Game & Watch handheld, the juggling game *Ball*.



28 April 1989
■ *Super Mario Bros 2* is released on the NES in Europe.



28 April 1993
■ Fighting game *World Heroes 2* arrives for the Neo Geo MVS arcade cabinet by ADK and SNK.

28 April 2006
■ GameCube and PS2 owners see the release of *Rampage: Total Destruction*, the monstrous environmental destruction game.





3 May 2002
■ The blue hedgehog is back with *Sonic Adventure 2: Battle* released on the GameCube.



3 May 2002
■ The open world racing game, *Crazy Taxi*, is released across Europe on Nintendo's GameCube.



2 May 1983
■ One of Imagine Software (and John Gibson's) earliest ZX Spectrum games, *Molar Maul*, is released.



30 April 1995
■ LucasArts unveiled *Full Throttle*, a SCUMM adventure game, on PC and Mac.



5 May 2006
■ *Metroid Prime: Hunters* arrives in Europe for the Nintendo DS.



6 May 1985
■ Budget maestro Mastertronic releases *Nonterraqueous* on the Spectrum. Strange name, great game.



7 May 1997
■ Save Earth as Kurt Hectic in the third-person shooter *MDK*, released on PC.



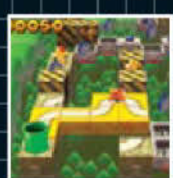
8 May 1986
■ Ultimate releases *Cosmic Battlezones*, a compilation of three games for the BBC Micro; *Jet Pac*, *Lunar Jetman* and *Alien 8*.



12 May 1999
■ Capcom released its *Street Fighter III: 3rd Strike* coin-op into arcades.



11 May 2001
■ Sega's racing game *Daytona USA* arrives on the Dreamcast in the UK.



9 May 2013
■ Nintendo's puzzle game, *Mario And Donkey Kong: Minis On The Move*, is released on the Nintendo 3DS.



9 May 1985
■ Virgin Games releases *Strangeloop* on the Commodore 64.



15 May 2003
■ *Enter The Matrix*, a game based on the *The Matrix* movies, is released.



22 May 1980
■ Namco releases *Puckman* into Japanese arcades. It's later released in America as *Pac-Man*…

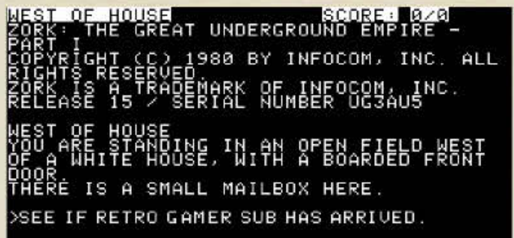


22 May 1998
■ *Unreal*, the first-person shooter developed by Epic MegaGames and published by GT Interactive, is released on PC.



22 May 2014
■ New issue of **Retro Gamer** hits the streets.

BACK TO THE EIGHTIES



» [PC] Infocom's first software release was the magnificent adventure game *Zork*.



THE LATEST NEWS FROM DECEMBER 1980

DECEMBER 1980 – Phoenix rises, Zero Hours sinks, Data East gets arty with DECO, Infocom releases Zork 1. Richard Burton drops a depth charge and blames it on the dog…



Amstar Electronics had a lovely Christmas present for everyone in gaming land with the release of its new coin-op title, *Phoenix*. The classic vertical shoot-'em-up had been developed by Amstar, which was located in Phoenix, Arizona, hence the name of the game, and it was picked up for distribution by Centuri in the US and Taito in Japan. Rather than being another *Space Invaders* clone and having round after tedious round of aliens to shoot, *Phoenix* had five distinct stages that looped with a raised level of difficulty each time. The first two stages saw waves of small bird-like aliens attacking your spaceship although their dive swooping patterns for both stages were different enough as not to be repetitive.

Stage three saw eggs hatch into large dive-bombing birds that buzzed your ship relentlessly and the fourth stage was similar again, featuring two further waves of attacking birds. In both of these stages the birds needed to be hit directly to be killed. If you hit a wing it was destroyed but could regenerate, while the bird carried on regardless.

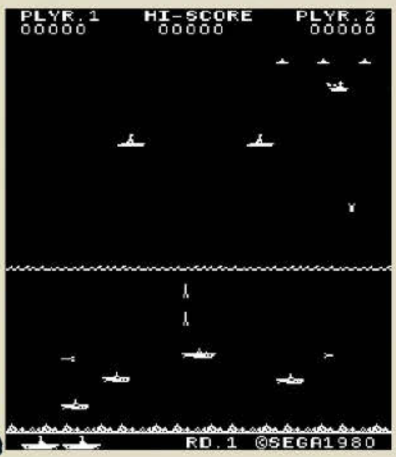
The fifth stage saw you take on the huge mothership piloted by the queen of the aliens. It's surrounded by more swooping birds and a seemingly endless barrage of laser fire. Your task is to blast away the rotating shield and surrounding hull of the mothership. Once you've damaged it enough you would get a clear shot at the queen inside. You do this while it slowly descends the screen toward you. It was testing yet distinctive and got the game noticed. It was also one of the first instances of a boss level in a coin-op game.

While Amstar was making an all-time classic vertical shooter Universal had a bash at the genre with its newest release, *Zero Hour*. If it was half as good *Space Panic*, which it had released the previous month, things would bode well…

Zero Hour sadly consisted of zero fun, clunky graphics and bugger-all playability. You pilot your spaceship, avoid some meteorites, shooting a few on the way and occasionally getting quadruple points for destroying a red meteorite. Then you get to chance your arm at placing your ship carefully back on the landing strip for a bonus.

The incoming meteorites were drawn as to give some form of perspective but everything was jerky and cumbersome and the lack of originality helped destine *Zero Hour* to zero game time in arcades.

While coin-op cabinets were being unveiled and removed as quickly as they were released, Data East thought it had come up with an ingenious way of solving the logistical problem of transporting big lumps of gaming furniture around or having to replace expensive PCBs.



» [Arcade] Sega's *N-Sub* was a simplistic affair yet played really well. It was later ported to Sega's first console, the SG-1000.



» [Arcade] Centuri's *Phoenix* was a classy shoot-'em-up that also had the memorable mothership stage to contend with.

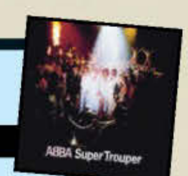
CHARTS

DECEMBER 1980









ARCADE

1	Pac-Man (Namco)
2	Battlezone (Atari)
3	Missile Command (Atari)
4	Space Panic (Universal)
5	Asteroids (Atari)

INTELLIVISION

1	Sea Battle (Mattel)
2	NASL Soccer (Mattel)
3	Skiing (Mattel)
4	Major League Baseball (Mattel)
5	Boxing (Mattel)

APPLE II

1	The Tarturian (Highlands Computer Services)
2	Tranquility Base (EduWare Services)
3	Odyssey: The Compleat Apventure (Synergistic)
4	Temple Of Apshai (Automated Simulations)
5	Mystery House (On Line Systems)

MUSIC

1	Super Trouper (Abba)
2	The Tide Is High (Blondie)
3	Banana Republic (Boomtown Rats)
4	Embarrassment (Madness)
5	To Cut A Long Story Short (Spandau Ballet)

THIS MONTH IN…

SOFTSIDE

Softside had a small feature that would be null and void in today's gaming age; 'What To Do While The Program Loads'. Written with humour but with a serious edge, suggestions included doing the laundry, sorting socks and making peanut butter and jelly sandwiches. Have these people never heard of Marmite before?



BYTE

Byte reviewed *Odyssey: The Compleat Apventure* for the Apple II. The game name deliberately misspelled with 'Apventure' referring to the "Ap" in Apple. Rubbish name aside, the game was one of the first role-playing videogames on a home system and the simple top-down graphics disguised a very good game.



COMPUTER AGE

Did you buy a ZX80 earlier in the year? Still persevering with just 1K of RAM? Well, struggle no longer. New out from Science Of Cambridge was the ZX80 RAM pack offering a massive 16K of memory. Feel the power… and sheer terror as your RAM pack wobbles potentially killing your computer…



Debuting in Japan was Data East Corporation's Cassette System, or DECO for short. It was the first attempt at standardising arcade games by using the same cabinet for multiple titles. This was done by loading the game via a cassette interface directly onto the RAM chips of the PCB. A security device also had to be attached to the machine to enable it to work. It was anti-piracy protection to stop dodgy arcade owners copying and distributing copies of the tape. The tape took approximately three minutes to load.

While the theory behind the system was sound, in practice there were problems primarily with the reliability of the cassettes and the quality of the games themselves was often brought into question.

The first game released as part of the DECO Cassette System was *Highway Chase*, also known as *Mad Alien*. It had already been released as a dedicated cabinet earlier in the year but Data East decided to also make it available on its Cassette System. A total of 47 arcade games were released on the format with most being insipid froth.

Two games were released for the DECO System in December – *Highway Chase*, a bizarre racing/space invaders mash-up, and *Sengoku Ninja Tai*, a 'shoot the ninja before they get to the top of the castle' game.

If you were weary of shoot-'em-ups and were turning into a trigger-happy zombie, why not engage your brain and adopt a more sedate pace with a newly released adventure by Infocom for PC, *Zork I: The Great Underground Empire*?



» [Arcade] Shooting battleships was a nice alternative to aliens.



"47 arcade games were released on the system, with most being insipid froth"

You were standing in an open field west of a white house, with a boarded front door… and so the adventure began. You entered the house to find a hidden trapdoor leading to the dungeons, and then it was on with the exploration and map making, an essential prerequisite in your primary goal; to find the 20 Treasures of Zork. Once you'd located them each treasure had to be placed in a trophy case.

Much battling of monsters and solving of puzzles followed aided by a descriptive and engaging storyline with a parser that was of a more elaborate standard than other text adventures.

Zork I became an instant hit with gamers and as such would go on to become one of the most well known and best-loved adventure game franchises. Not a bad first software release for Infocom, really.

Sega released a novel (and naval) game with *N-Sub*. Your submarine had to deploy its torpedoes to destroy the enemy battleships and submarines intent on blowing you up. Destroy their entire fleet of 12 ships and you moved up a level with a quicker, more deadly set of foes. It was simple, monochrome arcade fun from Sega which felt more like a RAM-packed enhanced ZX81 game rather than a fully-fledged coin-op cabinet. However, despite the poorly defined black and white graphics, it was still an oddly addictive little game. Who needs graphics when you can have playability?

DECEMBER WORLD NEWS

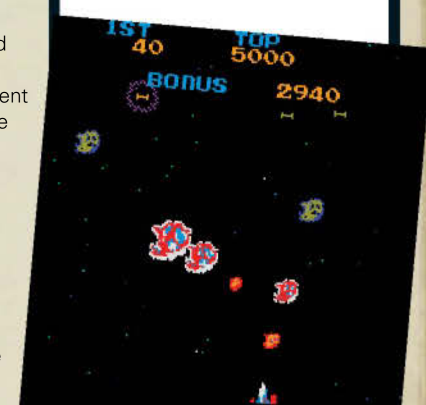
8 December saw the murder of the singer, songwriter and former Beatle, John Lennon. At 10.50pm he was shot four times in the back by Mark David Chapman as he climbed the steps to the entrance of the lobby of the apartment in New York he shared with wife Yoko Ono.

Chapman, a fan of Lennon and The Beatles, had asked him to autograph his copy of Lennon's *Double Fantasy* earlier that day.

Lennon was rushed to the nearby Roosevelt Hospital. On arrival he was not breathing and had no pulse. After frantic attempts to resuscitate with manual heart massage, Lennon was pronounced dead at 11.07pm. Cause of death was given as hypovolemic shock caused by blood loss. Given that Chapman had used hollow point bullets for maximum damage, Lennon suffered massive internal damage and blood loss.

8 December also saw the first episode broadcast of the children's television programme *Button Moon* following the adventures of Mr Spoon and his family as they travel to Button Moon, hanging in the blanket sky, in their baked bean tin/funnel rocket.

28 December saw news that long-standing regional television franchises would change. TSW would replace Westward with TVS replacing Southern although it would be a year before their first transmissions. TV-AM was also awarded the rights to broadcast breakfast television. Two days later the BBC would announce its own breakfast service called *Breakfast Time*.



» [Arcade] Rubbish shoot-'em-up of the month was Universal's Zero Hour. Guff of the highest order.

BACK TO THE NINETIES





» [Nintendo 64] We had seen previews for months but you didn't realise how very good it was until you actually played it.

THE LATEST NEWS FROM MARCH 1997

MARCH 1997 – Nintendo 64 arrives, The Last Express arrives on time, coin-op Tekken 3 takes your coins, Soul Edge battles on, Time Crisis reloads on PlayStation and the Vikings return. Richard Burton polishes his horny helmet…



Nine months after it made its commercial debut, with umpteen pages written about it in the British gaming press and with its launch caked in layers of thickly spread hyperbole, the UK and Europe finally got to meet the Nintendo 64 as of 1 March.

It was priced at £249.99 for the starter package (no games included) with launch titles priced between £49.99 and £59.99 each. Four games would be available: the hugely impressive *Super Mario 64*, *Star Wars: Shadows Of The Empire*, *Turok: Dinosaur Hunter* and *Pilotwings 64*.

Furthermore, a short list of impressive future releases was already being dissected and previewed. Within the next few months *Blast Corps*, *Wave Race 64* and *GoldenEye 007* were planned for release. Things looked peachy for the new Nintendo machine.

The Last Express was released by Brøderbund Software on PC, an adventure game set on the Orient Express just before the outbreak of World War One. Using a point-and-click interface you could interact with the scenery, objects and 30 different characters that moved around the train independently. The non-linear format of the game made it very easy to become immersed in with many different outcomes and endings available. It was also one of very first games to attempt to operate in real time.

Your character was Robert Cath, a doctor wanted for murder. A friend later asked you to meet him on the Orient Express with an escape plan. You boarded the train to find your friend murdered. So began an adventure of political intrigue, hidden agendas, lies and deceit.

Despite a fascinating storyline with graphics and sound to match and some exceptionally good reviews in the press, *The Last Express* failed dismally in the shops. This was no reflection on the game, rather the extremely short lifespan it spent in the shops due to no advertising budget. Brøderbund's marketing department had been dissolved a month before its release.

For something a bit rowdier involving being punched in the head repeatedly, look no further than the arcade release of *Tekken 3*, the latest in Namco's popular beat-'em-up gaming series. With a roster of 18 characters to choose from and having fully 3D backgrounds – a first for a *Tekken* game – it was already shaping up to be the best Tekken game so far. The storyline saw you taking part in the King Of Iron Fist Tournament 3, which pitted your wits against the fastest, deadliest fighters.



» [Super Nintendo] The Vikings are back and have friends with them. More top drawer bearded puzzlement.

It had beautifully designed backgrounds and characters, all with new moves and more realistic fighting styles. Players also had the ability to move in and out of the background rather than just forward and back. This all made for what many thought was the best *Tekken* game released and, when it was eventually ported to home systems, became one of the most lauded fighting games.

There was news of another beat-'em-up receiving great interest from the gaming press with some very impressive advanced previews doing the rounds. Developed by Project Soul and published by Namco was *Soul Edge*, an arcade game undergoing conversion to the PlayStation.

The weapon-based 3D fighting game would see 12 different characters battle it out with distinct styles of combat. The graphics were impressive; both fluid and defined while the gameplay was slick. Set in the 16th Century, it told the story of warriors searching for the Soul Edge, the greatest sword of them all.



» [PlayStation] Namco's fighting game *Soul Edge* arrives, laying the foundation for the equally superb sequel *SoulCalibur*.

THIS MONTH IN…

COMPUTER AND VIDEOGAMES

The burgeoning arcade sections of *C&VG* were stuffed full of info and character breakdowns on two fighting games in competition with each other; Namco's *Tekken 3* and Capcom's *Street Fighter III: New Generation*.



MEAN MACHINES SEGA

With a dwindling Mega Drive readership pushed out by its more powerful big brother the Sega Saturn, *Mean Machines Sega*'s run finally ended this month with issue 53. Twice awarded Magazine Of The Year, it would be absorbed into sister publication the *Official Sega Saturn Magazine*.



NEW ATARI USER

Its article 'Journey Into Cyberspace' looked at Atari's presence on the web highlighting what Atari based websites were available. An initial Yahoo search for Atari (yielding 203 site matches) led to reviews of Atari Archives and the Atari 8-Bit homepage. The same search today brings up over 12 million matches.



CHARTS

MARCH 1997



SATURN

1. Virtua Cop 2 (Sega)
2. Worldwide Soccer '97 (Sega)
3. Tomb Raider (Eidos)
4. Daytona USA CCE (Sega)
5. Command & Conquer (Virgin)



MEGA DRIVE

1. FIFA '97 (Electronic Arts)
2. Sonic 3D (Sega)
3. Premier Manager '97 (Sega)
4. Toy Story (Sega)
5. Desert Strike (Electronic Arts)



PLAYSTATION

1. Tomb Raider (Eidos)
2. Die Hard Trilogy (Electronic Arts)
3. FIFA '97 (Electronic Arts)
4. Soviet Strike (Electronic Arts)
5. Crash Bandicoot (Sony)



MUSIC

1. Mama/Who Do You Think You Are? (Spice Girls)
2. Don't Speak (No Doubt)
3. Encore Une Fois (Sash!)
4. Hush (Kula Shaker)
5. Alone (The Bee Gees)



» [Arcade] *Rampage: World Tour* sees monsters laying waste to cities once more… exactly like the original game.

Despite a name change to *Soul Blade* for European and North American territories, the game would prove to be a roaring success both critically and financially. More sequels were developed, the first of these being a classic itself, the outstandingly playable *SoulCalibur*.

Another arcade conversion being ported by Namco to the PlayStation was the rail shooter *Time Crisis* which would come bundled with the hip sounding G-Con 45 lightgun. *Time Crisis* saw you play Richard, a special agent, who had to battle his way through hordes of henchman and ninjas to find the President's kidnapped daughter.

Although your character moved automatically once an area had been cleared of evildoers, you could duck out of view when the action became overwhelming. However, a finely balanced time limit stopped this from becoming a regular occurrence and encouraged the player to take risks.

Time Crisis could be criticised for being repetitive, having a lack of power-ups and criminally missing a simultaneous two-player option. However, it would still be one of the best shooters on the PlayStation.

Rampage World Tour was another March arcade addition, this time from Midway Games. You played as one of three scientists who had accidentally been mutated into monsters at their Scumlab laboratory. The aim of the game from then on was to travel the world destroying all of Scumlab's facilities while laying waste to as much of the city as possible.

It was everything you would expect from a *Rampage* game, yet it didn't impress gamers. While the three-player destruction was undeniably good fun, it had progressed very little from the original and gamers with left feeling underwhelmed. A planned coin-op sequel, *Rampage – Universal Tour* was scrapped before production could commence.

SNES gamers were happy to see the return of their favourite band of bearded heroes in *The Lost Vikings 2* from Interplay. You once again controlled the three original characters; Erik, Baleog and Olaf, with the addition of two new ones; a dragon called Scorch and a werewolf called Fang, with each character having their own special aptitudes.

Gameplay in this side-scrolling puzzle platformer was much the same as the original with one-player and cooperative two-player options available. The 3D-rendered characters looked great and the puzzles were chin-scratchingly testing.

MARCH WORLD NEWS

22 March saw the comet Hale-Bopp makes its closest approach to Earth. The comet had been visible with the naked eye for months but hopes were high for it developing into a spectacular brightly tailed comet. Astronomers waited for April to arrive to see how if Hale-Bopp would be a spectacle or a damp squib. Either way, it's predicted not to be in our neighbourhood again until the year 4385…



6pm on Easter Sunday 30 March saw the launch of a fifth terrestrial television channel in the UK, the aptly named Channel 5. The first piece of programming to feature was The Spice Girls singing a rewritten rendition of Manfred Mann's Sixties hit *5-4-3-2-1*.

On 10 March over in the US of A, supernatural fantasy television show *Buffy The Vampire Slayer* was airing for the first time. It starred Sarah Michelle Gellar in the title role as Buffy Summers, who is chosen to be a slayer; a dispatcher of demons, vampires and other supernatural entities. Series creator Joss Whedon later went on to create cult sci-fi series *Firefly*, directed the hit movie *Avengers Assemble* and co-created Marvel's *Agents Of SHIELD*.

Not to be left out, the UK also had a new series debuting on 31 March, although the pre-school programme phenomenon, *Teletubbies*, didn't seem as exciting as *Buffy*. However, like *Buffy*, *Teletubbies* garnered much critical acclaim and was a huge commercial success too. It ran for 365 episodes – one for every day of the year.

»[Arcade] *Tekken 3* arrives in arcades and is easily the best *Tekken* game so far.



retro GAMER.net READER'S REVIVAL

Croc: Legend Of The Gobbos

FAR FROM A LOAD OF OLD CROC...

#74

» ARGONAUT SOFTWARE » PLAYSTATION » 1997

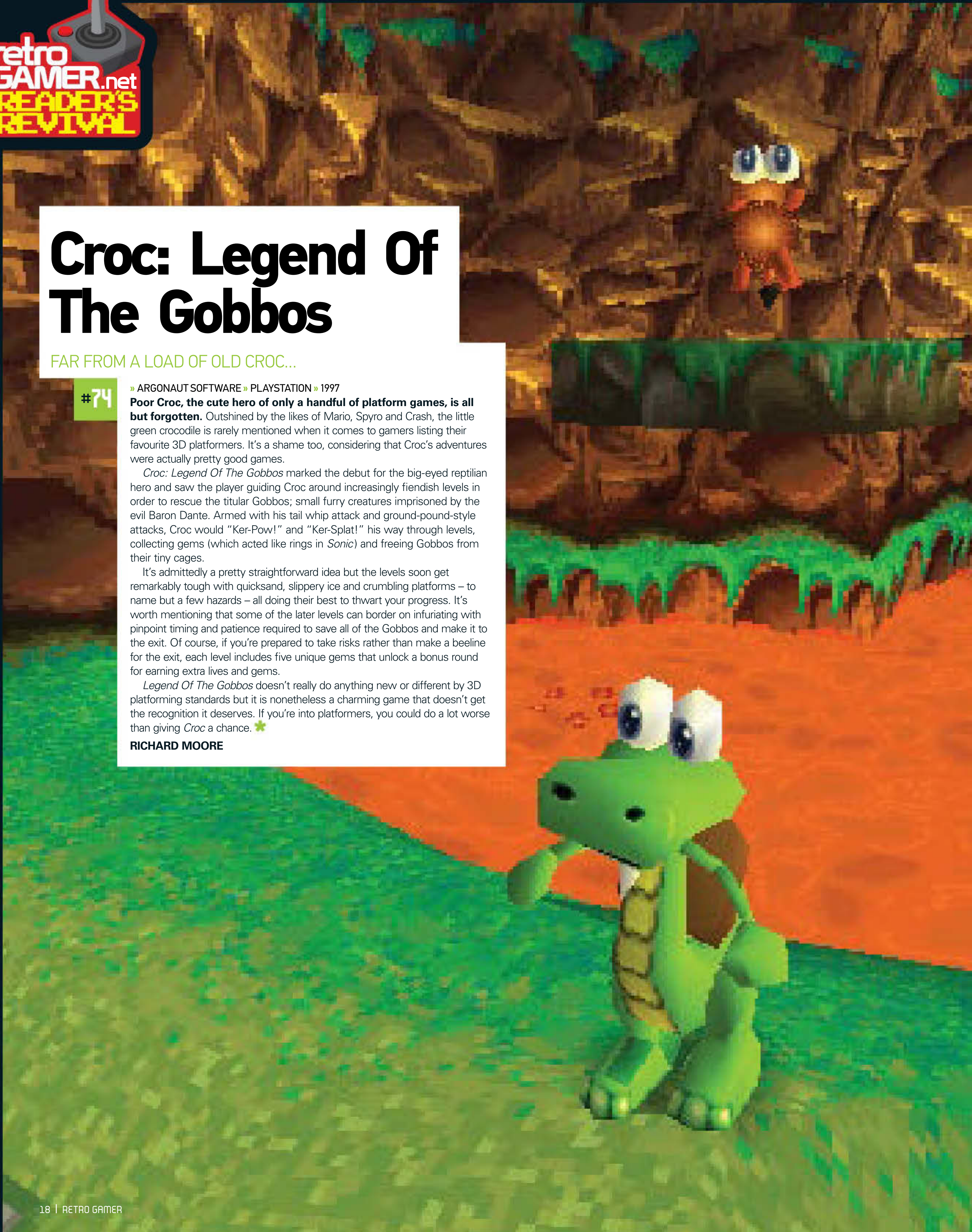
Poor Croc, the cute hero of only a handful of platform games, is all but forgotten. Outshined by the likes of Mario, Spyro and Crash, the little green crocodile is rarely mentioned when it comes to gamers listing their favourite 3D platformers. It's a shame too, considering that Croc's adventures were actually pretty good games.

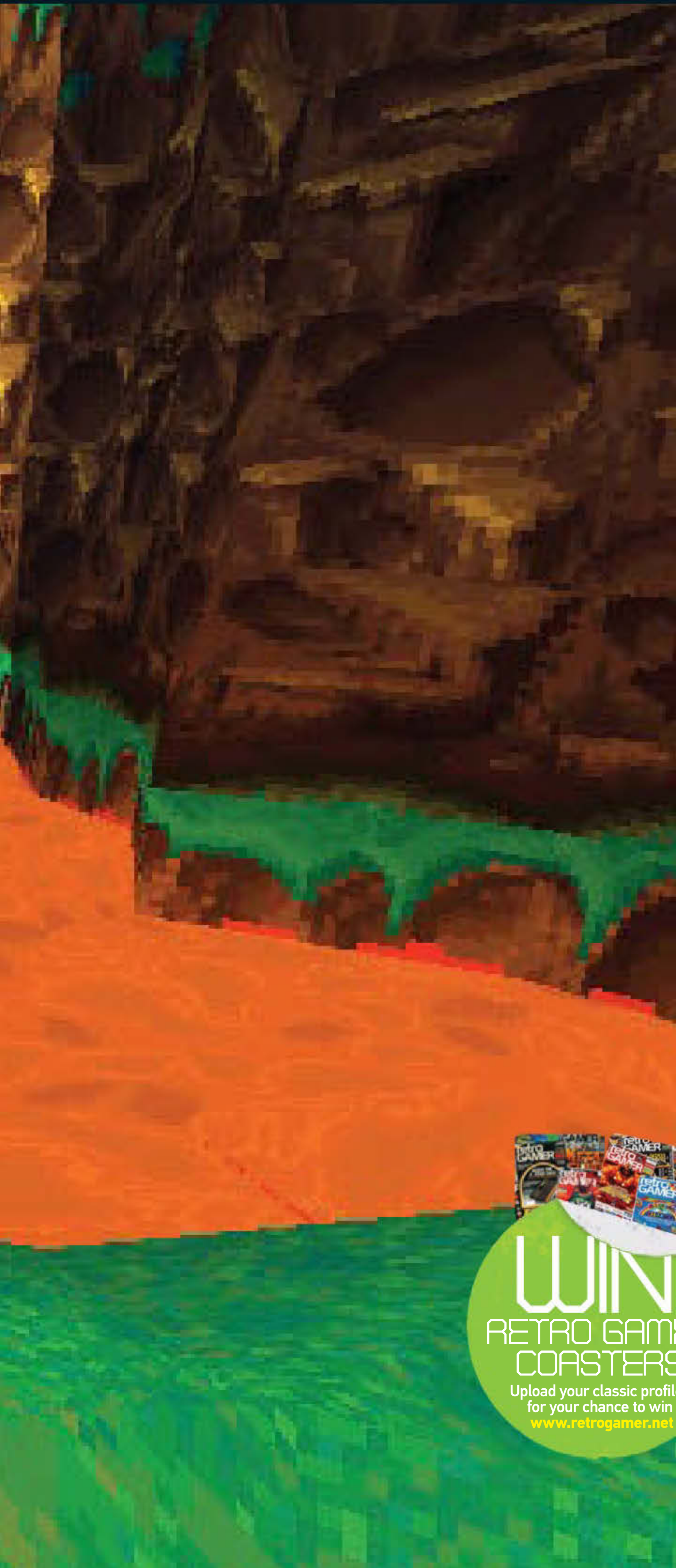
Croc: Legend Of The Gobbos marked the debut for the big-eyed reptilian hero and saw the player guiding Croc around increasingly fiendish levels in order to rescue the titular Gobbos; small furry creatures imprisoned by the evil Baron Dante. Armed with his tail whip attack and ground-pound-style attacks, Croc would "Ker-Pow!" and "Ker-Splat!" his way through levels, collecting gems (which acted like rings in *Sonic*) and freeing Gobbos from their tiny cages.

It's admittedly a pretty straightforward idea but the levels soon get remarkably tough with quicksand, slippery ice and crumbling platforms – to name but a few hazards – all doing their best to thwart your progress. It's worth mentioning that some of the later levels can border on infuriating with pinpoint timing and patience required to save all of the Gobbos and make it to the exit. Of course, if you're prepared to take risks rather than make a beeline for the exit, each level includes five unique gems that unlock a bonus round for earning extra lives and gems.

Legend Of The Gobbos doesn't really do anything new or different by 3D platforming standards but it is nonetheless a charming game that doesn't get the recognition it deserves. If you're into platformers, you could do a lot worse than giving *Croc* a chance.

RICHARD MOORE











The Making of

GOLDEN AXE

Inspired by the antics of an oiled-up Arnold Schwarzenegger, Sega's Golden Axe was one of the first scrolling beat-'em-ups with a Western-style fantasy setting. Mike Bevan goes behind the scenes with creator Makoto Uchida



IN THE KNOW

» **PUBLISHER:** SEGA

» **DEVELOPER:** SEGA

» **RELEASED:** 1989

» **PLATFORM:** ARCADE, VARIOUS

» **GENRE:** SCROLLING BEAT-'EM-UP

Here's a fun question for all you retro-heads… which came first, *Final Fight* or *Golden Axe*? Both made their appearance in arcades in 1989, but it might surprise some to find that *Golden Axe* appeared a few months before Capcom's brawler, in the summer of that year. And while *Final Fight* was a more influential and arguably more polished title, and the template for the myriad of clones that followed it, Sega's fighting fantasy perhaps had the more visually engaging theme. With its axe-wielding warriors, scantily-clad Amazonians and dragon-riding adversaries, *Golden Axe* evoked the stylings of Hollywood B-movie cult classics like *The Beastmaster* and *Conan The Barbarian*. Its fiery, magic attacks that cut through baddies like a coin-op apocalypse were a novelty the likes of which had never been seen, and its background design, with turtle-back villages and scraps on the back of giant eagles, felt fresh and, let's face it, looked extremely cool. After all, Mayor Mike Haggar never got the thrill of jumping on the back of a chicken-leg monster and bashing a couple of sword-wielding skeletons to death (again) with its tail.



Golden Axe was the second Sega arcade game project from Makota Uchida, following his mythology-inspired brawler *Altered Beast*. "When we reached the final stages of the development of *Altered Beast*, our boss asked our team to come up with a new game," he recalls. "The given proposition was an action game that ran on [*Altered Beast*'s] System 16 arcade board, with similar gameplay to Technos' *Double Dragon*, which was a popular arcade game at the time. My idea was to come up with a *Double Dragon* that was not a *Double Dragon*… Technos was an experienced rival who had been working on the *Kunio-Kun* series, so there was no way we could compete if we did the same thing as them. I had a feeling that arcade games should be competitive against the great hit console title *Dragon Quest* (created by Enix) and therefore studied the world of magic and swords, combined this with the gameplay of *Double Dragon*, and finally came up with the concept of *Golden Axe*."

What emerged was a East-meets-West vision of high fantasy, sprinkled with a little of the spirit of Enix's role-playing game, along with liberal helpings of pulp and classic American and European influences. This offered a welcome and refreshing change to the murky ghetto-like stylings of *Renegade* and *Double Dragon*. "My father loved action movies and I used to watch them with him," Uchida tells us. "During the development of *Golden Axe*, I rented a video of *Conan* and watched until the tape was worn… Of course I was also inspired by *Lord Of The Rings*. I bought many illustration works based on Middle-Earth and used them as reference materials. If I could, I would vote Gandalf for president!"

Although the game's plot is hardly Tolkien, it's a reasonably entertaining premise in a cheesy midnight-matinee kind of way. In ▶

GOLDEN MOMENT



#1

HAND OF FATE

■ From the off, the tone of the game is set with *Golden Axe*'s chilling character-select screen. Having our three mighty heroes perched on the outstretched hand of a grinning skeleton is a reminder that death is just around the corner.



CHOOSE YOUR WARRIOR…

The three key heroes of Golden Axe. Who was your favourite?

AX BATTLER

■ The lead hero of *Golden Axe* is oddly-named seeing as he sports a big sword rather than a hatchet. Ax is probably the most well-rounded character, with decent melee-abilities and effective explosive magic.

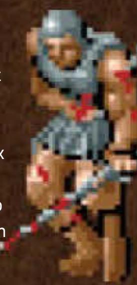
GILIUS THUNDERHEAD

■ Although intended as another support character, dwarven warrior Gilius is one of the most popular of the trio to play due to the large reach of his enormous axe. He can also summon lightning magic on his foes.

TYRIS FLARE

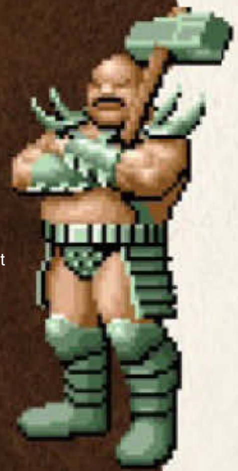
■ Tyris is supposedly the weakest of the three characters from a melee standpoint, although in practice she's pretty nifty with her rapier. A mistress of fire magic, her spells are the most damaging in the game.

KNOW YOUR ENEMIES



ALEX

■ They've already lost parents and siblings to Death Adder, but losing their friend Alex is the final straw for our three heroes, who head off to avenge him as soon as he dies.



BAD BROTHERS

■ These two bald giant brothers are the first bosses you encounter and are more than happy to crush you with their huge hammers. Nasty.



HENINGER

■ All scrolling fighters need throwaway cannon fodder and Heninger fulfils his purpose admirably. Fortunately he's quite easy to beat.



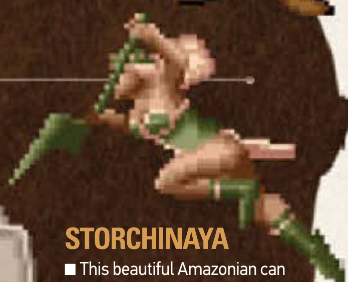
LONGMOAN

■ Another fodder character who is surprisingly easy to beat. Watch out for his sneaky shoulder charge and bring him down quickly.



BITTER KNIGHT

■ This huge boss has a deadly dangerous reach and can easily take you down with a single swipe of his sword or shield.



STORCHINAYA

■ This beautiful Amazonian can put up a tough fight and dishes out a surprising amount of damage. Is often encountered on a bizarrian to begin with, but can easily be dismounted.



SKELETON

■ Clearly inspired by the work of Ray Harryhausen this skeletal foes are absolute buggers to defeat and have a wide range of extremely dangerous attacks.



DEATH ADDER

■ This is it, this is Death Adder and he's as deadly as his name suggests. In addition to wielding the Golden Axe of the title, he's always surrounded by skeleton minions and has some devastating magic. Your best bet it to wedge him against the side of the screen and wail on him.



» [Arcade] We're informed that some of the digitised screams in the game are from *Rambo: First Blood*.

GOLDEN MOMENT

#2 THEY KILLED ALEX…

■ Were not sure if Makoto Uchida has something against Sega mascot Alex Kidd, but *Altered Beast* features gravestones bearing his name and in *Golden Axe* the first person to die is called Alex. Perhaps it's just a coincidence…

▶ the fantastical realm of Yuria, a fiendishly intimidating villain named Death Adder has captured the King and his daughter, and has imprisoned them in their castle. He's also got his evil mitts on the Golden Axe, the magical emblem of Yuria, and threatens to destroy the royal family and their precious heirloom unless the populace accept him as their divine leader. So begins the quest of three mysterious warriors, each with a score to settle with the Dark One, who set out on a quest to free Yuria and seek their revenge.

From the start, Uchida's team opted to mirror *Double Dragon* in providing support for two simultaneous players, with a choice from three suitably buff characters – a lead male barbarian, Ax Battler, a female Amazon, Tyris Flame, and a dwarf, Gilius Thunderhead, possessor of the game's most aggravating-looking weapon. "I thought that the balance of having one hero and two support members was best, comments Uchida. "We differentiated the support characters by changing their abilities. One who is superior in using magic (Tyris), and the other who is not so good with magic, but strong in melee combat (Gilius)." Given that there were three playable characters though, did Uchida's team think about adding three-player support at all? "We did consider that plan, but we gave up due to the hardware specs," he replies. "The maximum number of characters, including the enemies that we could display and operate at once was six. But by the time we created the next title, *Revenge Of Death Adder*, the hardware specs had allowed us to make the game playable for up to four players simultaneously."

As a genre scrolling beat-'em-ups are by nature fairly simplistic and repetitive, something that still applies to modern titles like *Castle Crashers*. But Uchida's team made an effort to vary the standard attacks from slashing blades and throws to bashing baddies on the head with the hilt of the hero's sword, complete with a satisfying clunking sound. Double-tapping



» [Arcade] A rampaging chicken-leg monster about to take out Ax's kneecaps.



» [Arcade] Ax and Gilius arrived at Turtle Village just in time for a barbecue.



BOX BATTLES

Sega's classic brawler had a range of interesting looking covers…



GENESIS

■ Why does Ax Battler look like Conan? Why is he holding an axe? Why do we care so much? Very poor.



8-BIT/16-BIT

■ Yes it's heavily inspired by *Conan*, but at least it ties in with the actual game and is fairly authentic. A much better effort.



MEGA DRIVE

■ It's clearly been inspired by *Master Of The Universe*, but it doesn't stop it from being awesome.



PC ENGINE CD-ROM

■ A straightforward representation of *Golden Axe*'s title screen doesn't prepare you for the horrors on the disc.



PS2

■ This is easily the best part of Sega's shocking update. Special points for the giant eagle too.



MASTER SYSTEM

■ A very authentic representation of the barebones content found inside.

> "During the development of Golden Axe, I rented a video of Conan and watched until the tape was worn" Makoto Uchida

the joystick allowed for a shoulder charge or flying kick, while attacking in mid-air pulled off a powerful diving weapon smash that was tricky to time right but highly damaging if it caught an enemy off-guard. One of the game's most notable signature moves was the backward spin attack, when pressing both attack and jump buttons together whirled your hero around 180 degrees to hack at an enemy behind you. This was particularly useful when enemies surrounded you.

While *Golden Axe* was one of the games that pioneered the concept of the weapon-based brawler, this added a few other design restrictions, as Uchida explains. "The general gameplay for action games is to carefully observe the distance [from] your enemy and to attack in the correct timing. It is very similar to hitting a ball with a baseball bat. The reason those games were generally side-view was because a silhouette of a human is most recognisable when seen from the side, and you could draw the human large enough to invoke emotional involvement. Now, if we want the character to permanently hold a weapon in a side-view game while maintaining the size of the character, the character will have an enormous reach and will become too strong. It will become too difficult to adjust the game balance, so you would have to draw the character smaller if you want him or her to walk freely with a weapon, and this was another difficulty. For those reasons, most of the games in the genre were fought with bare hands. It was the same with Sega games [including *Altered Beast*]. But, we decided to give weapons to the characters to make the game different from *Double Dragon*. We adjusted the swing so the characters could not attack too far. We had to draw the playable character small, but instead we made the boss enemies and magic [effects] huge…"

And they were certainly impressive, from Ax's mini mushroom-clouds and Gilius's lightning-bolts to Tyris's ultimate magic attack, a screen-high fire-breathing dragon. Each of the three characters had to collect magic potions to power-up their spell bars by whacking little gnome creatures, either in the main game or a humorous intermission around a campfire. Working out the best time to use spells, either casting lowly, less damaging attacks on smaller minions, or saving up all your potions to unleash a massive firestorm on bosses, added a degree of strategy to the gratuitous hacking and slashing. "I happened to have knowledge of element-based magic, so I simply applied it," says Uchida rather enigmatically. "Although we did not select water, because water would be a healing magic, rather than an attacking magic."

Another memorable feature of the game was the addition of rideable beasts. One creature that makes an appearance in *Golden Axe* – the so-called chicken-leg monster or cockatrice – had first cropped up as a monster in *Altered Beast*. In *Golden Axe* it makes its entrance as the steed of a clan of ferocious Amazon women. Later,

GOLDEN MOMENT



#3 LAUGHING GIANTS

■ The first pair of bosses in the game are these hammer-wielding giants, who spend a fair bit of time standing and laughing to themselves at your efforts to dispatch their henchmen. Never mind, they won't be giggling in a minute.

DEVELOPER HIGHLIGHTS



ALTERED BEAST (PICTURED)
SYSTEM: ARCADE
YEAR: 1988

ALIEN STORM
SYSTEM: ARCADE
YEAR: 1990

GOLDEN AXE: THE REVENGE OF DEATH ADDER
SYSTEM: ARCADE
YEAR: 1992

GOLDEN MOMENT



#4 TURTLE VILLAGE

■ As one of the game's intermission screens is keen to point out, the first village our heroes reach is situated on the back of a giant turtle, complete with greenery growing out of its shell. We're not exactly sure why they built it there though.



» [Arcade] Gilius calls on the God of Thunder while Ax takes a nap.



» [Arcade] These guys again?

players encounter two types of dragon which, after demounting their riders with a swift blow to the head, can be ridden into battle spewing flame or blasting fire bolts at the bad guys. "This idea came from an art asset painted by a senior artist," adds Uchida. "A character was riding on a monster using a saddle. I saw it, and thought we could use this in the game…"

Speaking of fantastic beasts, we ask Uchida why the team decided against following *Altered Beast*'s lead of implementing monster or creature guardians, rather than the knights and giants that make up the main bosses of *Golden Axe*. "We had to give up some small details, but basically everything is in the game," he explains. "I'm surprised you noticed this. This was intended. As part of *Golden Axe*'s concept, we decided to design the enemies as close to human. We wanted to stick to the gameplay of 'human versus human'. If there is no unity in gameplay, it will be difficult for the user to learn and advance the play skill."

An amusing final surprise is left to the last reel of the game. After Death Adder is vanquished and the credits roll, the game goes all *Blazing Saddles* on us and the cast of *Golden Axe* burst out of their arcade cabinet and go running through the streets of an Eighties metropolis, Benny Hill-style. "Just like my other titles, like *Altered Beast* and *Alien Storm*, I like joyful endings," Uchida tells us. "In *Golden Axe* the characters pop out of the game, this is because I wanted this to happen. When you were a child, I bet you wanted the characters from TV programmes and videogames to come out of the screen, right?"

Uchida also offers us a potted history of how the game ended up being christened *Golden Axe*. "The name of the game changed three times," he reveals. "Originally, it was called 'Battle Axe'. The development team members liked it, but we gave it up for licence reasons. The next name was 'Broad Axe'. This was an English word that we thought would match the original Japanese title. There were no licence issues, and so the development moved on. But, right before the end of the development, the president of Sega US saw Gilius's axe, which was a bit yellow-ish. He thought that colour was gold and he said 'Golden Axe' is the title of the game. We didn't like the name because it had no relations with the Japanese, but we were threatened that he would not sell the game if the title name was not 'Golden Axe' and so we changed the title name. Death Adder's axe was coloured gold, instead of the original silver and we also changed the plot to match the name. I now think it was good that we had changed the name and I appreciate his advice."

With the arcade game proving a big draw for fans of hack-and-slash fantasy it seems the team was well rewarded after its year-long development project. Like *Altered Beast*, Sega selected *Golden Axe* to be ported to its Mega Drive/Genesis console. The result was, save a few shortened areas, an authentic conversion that added an extra level to the end of the game, and new a final boss called Death Bringer. However it turned out he was really just another version of Death Adder in disguise… "I was an advisor providing advice to the development team," Uchida tells us. "The basic game is the same as the arcade version, and I think the conversion was really good. If I could say something, the Death Bringer could have been better and I wanted to give him a better name; I wanted him to appear in a more dramatic way and I wanted to change how he looks, not just the colour. He is the final boss, and so he should be most impressive." Sega also released a Mega CD port, with improved animation but solo-play only, and a butchered version of the game for the Master System, with Ax Battler as the only playable character. Virgin Interactive was granted the licence to produce ports for the Amiga, Atari ST, C64, Amstrad CPC and Spectrum, which were coded by Probe Software, while Japanese developer Telnet produced the disappointing PC Engine CD version.

GOLDEN MOMENT



#6 BURN, BABY, BURN

■ The spells of *Golden Axe* provide some of its most memorable moments, with the lion's share being given to Tyris Flare and her pyrotechnic box of tricks, including phantoms, lava eruptions and the fire-spewing dragon.



» [Arcade] Girl power before the Spice Girls.



» [Arcade] Ax unleashes a mini-apocalypse on a pink knight.



» [Arcade] We're surprised Gilius can even lift that massive axe.



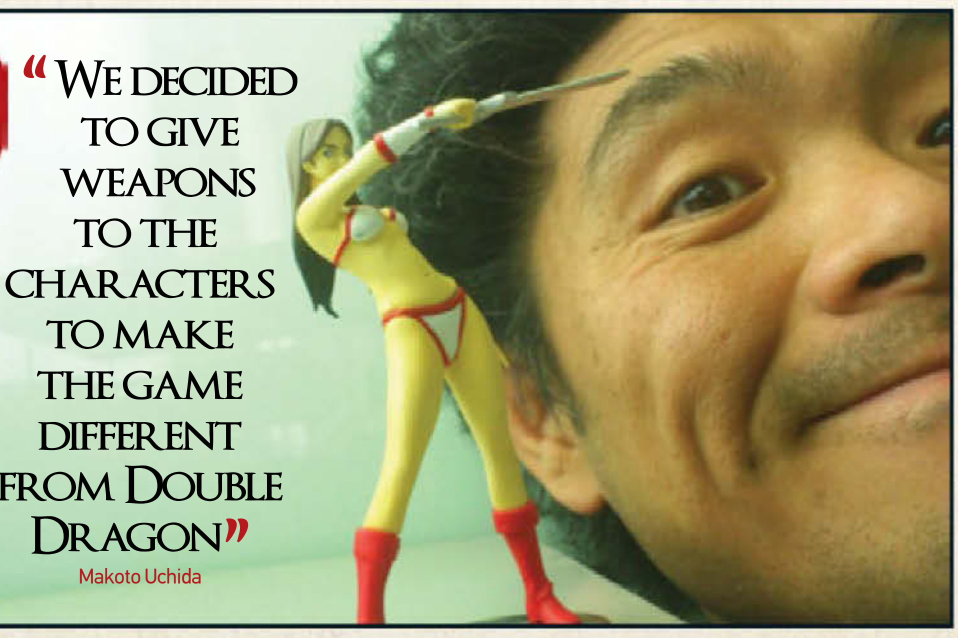
» [Arcade] Tyris rustles up a fire spell while Gilius does a bit of dwarf skeleton tossing.

GOLDEN MOMENT



#5 GNOME-WACKING

■ These little gnome fellas show up sometimes during the game, and can be bashed for extra potions or pick-ups. Then there are these camp-fire intermissions where the sneaky beggars try to steal your swag.



> "We decided to give weapons to the characters to make the game different from Double Dragon"
>
> Makoto Uchida



» [Arcade] Death Adder about to rise from his grave.



» [Arcade] None shall pass!

The popularity of the rather more accomplished Mega Drive cartridge release led to a couple of exclusive sequels on that console, although Uchida wasn't involved in either of them. But he did return with his 'true' arcade sequel, *Golden Axe: The Revenge Of Death Adder*, which included four new playable characters and even more spectacular, and sometimes gruesomely over-the-top magic effects. Bigger and more involving than its prequel, many fans would consider this entry as the high point of the series. More recently the franchise suffered from lacklustre sequels like *Golden Axe: The Duel* and the critically panned *Golden Axe: Beast Rider*, released on PS3 and Xbox 360 in 2008. But of all the *Golden Axe* titles, the original incarnation was the game that made the biggest splash in its day and remains most fondly remembered, with versions still selling on a range of modern consoles and portable devices. We ask Uchida why he thinks his famous fantasy brawler has endured so well in the public imagination as it approaches its 25th anniversary. "Probably because it was one of the earliest action games that was based on the fantasy world of swords and magic," he muses. "The visual effects of the magic [spells] were pretty neat for a title back then, and probably people remembered it with the surprise of seeing new stuff." And we can't argue, thinking back to when we first saw that enormous dragon head hove into view and roast the occupants of the arcade cabinet to charcoal while Tyris strutted her stuff in a medieval bikini. That was something you didn't see every day back then. ✱

GOLDEN MOMENT



#7 BEAST RIDERS

■ Alongside the magic effects, one of *Golden Axe*'s signature features is the ability to steal the steeds of adversaries and turn them against them, from the lowly chicken-leg monster to this extremely nasty fireball-spitting beastie.



» [Arcade] XThe post-level intermission screen – your handy guide to the realm of Yuria.

GOLDEN AXE: THE SEQUELS



GOLDEN AXE II (1991)

■ This Mega Drive exclusive doesn't differ much from the original, with our three heroes returning to defeat a new archenemy called Dark Guld. The move set has been tweaked, for instance Tyris now has a back-flip attack, and the magic effects are a little weaker looking, but some of the music, from *NiGHTS Into Dreams* composer Naofumi Hataya, is most impressive.



GOLDEN AXE WARRIOR (1991)

■ Released for the Master System, perhaps to make up for its woeful conversion of the arcade game, this was actually an action-RPG, and a rather shameless clone of Nintendo's *Zelda*. Tasking players with finding nine magic crystals hidden by Death Adder in the oddly-named kingdom of Firewood, it was a fun quest, and one of the last releases for Sega's 8-bit console.



AX BATTLER: A LEGEND OF GOLDEN AXE (1991)

■ Sega's Game Gear also got its own *Golden Axe* spin-off that respectfully ripped off another *Zelda* title, *Link's Adventure*. It's an action-RPG with a top-down overworld for exploring, which switches to the more familiar side-view of Ax when he's, ahem, battling.



GOLDEN AXE: THE REVENGE OF DEATH ADDER (1992)

■ The only other *Golden Axe* title involving Makoto Uchida, this arcade sequel ran on Sega's powerful System 32 board. Featuring four new characters, including a female centaur and a giant, it's definitely one of the top Nineties scrolling beat-'em-ups.



GOLDEN AXE III (1993)

■ This Japan-only Mega Drive sequel may have been influenced by *Revenge Of Death Adder*, with its larger characters and multiple routes. There are some nice set pieces like a fight on a wagon, and another decent Hataya soundtrack, but it feels more like *Streets Of Rage* than *Golden Axe*. Not that that's a bad thing.



GOLDEN AXE: THE DUEL (1994)

■ The third and final *Golden Axe* arcade title departed from the scrolling beat-'em-up formula, instead taking the form of a *Street Fighter II*-style one-on-one fighting game. Utilising Sega's STV board, based on its Saturn console hardware, the main draw of the game was getting the chance to play as Death Adder himself.



GOLDEN AXE: BEAST RIDER (2008)

■ A bloody re-imagining of the franchise, *Beast Rider* is a 3D hack-and-slash with little in common with its predecessors, save for the appearance of an unrecognisable Tyris Flare as its beast-riding heroine. Riding giant beasts is enjoyable, but combat is awkward, as is the finicky camera system.


1


5

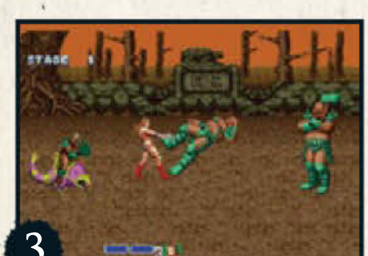

6

GOLDEN MOMENT

#8 HYDRA'S TEETH?

■ In a nod to Ray Harryhausen, our heroes encounter an army of skeletons on the back of a giant eagle. Given arcade technology, we'd have to say they are not as well animated as the ones in *Jason And The Argonauts*…


2


3



4


7


8

GOLDEN MOMENT



#9 MEET DEATH ADDER

■ The final showdown with Death Adder is worthy of any *Conan* film. After regenerating from a pile of carcasses, he attacks you with scary energy blasts and a very big axe, which ultimately proves his undoing.

MASTERING THE AXE

The best and worst conversions of Sega's classic brawler

Sega's own Mega Drive **(1)** port is extremely close to the original game, featuring slightly smaller spites and weaker audio. Approved by Uchida himself, it adds extras including 'Duel' and 'Beginner' modes and a brand new level featuring Death Bringer, Death Adder's purple-skinned boss. It's arguably the best early version available. By comparison, the Master System **(2)** effort is atrocious. Tyris Flare and Gillius are missing (although their magic remains) the graphics and animation are terrible, while the multiplayer is absent.

The Mega CD **(3)** also misses the multiplayer mode, but does include better animation and great Red Book audio. The GBA outing **(4)** on the *Sega Smash Pack* is very poor. The playing area feels cramped, the collision detection is appalling, and it has atrocious audio and missing music. The *Dreamcast Smash Pack* port is another disappointing Mega Drive conversion with similarly poor audio. The Mega Drive outing continued to form the basis for many later compilation console ports, including the PC, PS2, PSP, PS3 and Xbox 360. It's also the basis for Lavastorm's reasonable Tapwave Zodiac port and the iOS **(5)** version, which is an otherwise authentic release hampered by fiddly controls. A far better handheld effort is on the WonderSwan Color **(6)**. It features improved visuals, new combat animations and a decent soundtrack, a much better alternative to Tiger's bland LCD effort. The worst console effort is Telenet's PC Engine CD **(7)** port, which suffers from terrible animation, clunky controls, naff remixed tunes and laughable animated cut-scenes.

The 8-bit home computer ports are all by Probe and quite mixed. The C64 **(8)**

9



10



11





> “DEATH ADDER’S AXE WAS GOLD AND WE ALSO CHANGED THE PLOT TO MATCH THE NAME”
>
> Makoto Uchida

12



GOLDEN MOMENT



#10 BLAZING DRAGONS

■ On beating *Golden Axe*, players are greeted with one of the funniest end-credit sequences ever to grace a coin-op, as the various villains you’ve fought burst out of the cabinet and run out of the arcade with our heroes in hot pursuit.

14





13

offers incredible music, muddy visuals, poor controls, no multiplayer and there’s only ever one enemy on-screen. The Amstrad and Spectrum versions fare better. The Spectrum **(9)** iteration is very decent, with far better hit detection and the all-important two-player mode. The graphics look weedy and garish, but it remains solid. The Amstrad **(10)** one is even better with far more detailed visuals and the same two-player mode.

Things were far better on the 16-bit formats, with Probe once again on coding duties. The Amiga **(11)** version is brilliant with visuals that are arguably better than the Mega Drive game. The animation and scrolling is super slick, while the tunes sound a lot punchier than Sega’s effort. It misses out on the control front, but this is otherwise very, very good and virtually identical to the Atari ST outing. Interestingly, the PC **(12)** port seems to be based on the Mega Drive game, as it features the same ‘Beginning’ and ‘Duel’ modes, and the Death Bringer colour palette, but not the final level. Sadly, it has terribly jerky scrolling and poor audio.

The best current version can be found on the Xbox 360 **(13)** and PlayStation 3, they’re both very accurate arcade ports and also feature online play. The Arcade version and Mega Drive outings are also available on the Wii’s Virtual Console, but without online support. *Golden Axe* can even be found on mobiles, but it suffers from cramped controls and weedy looking visuals. Perhaps the biggest atrocity though was Sega’s attempt to remake the game for PS2 **(14)**. It should have been an incredibly accurate arcade port but was a botched 3D reimagining with laughable visuals and excruciatingly painful gameplay.

A MOMENT WITH...



Roland Perry

Every issue, we put an industry veteran in the hotseat. This month, Retro Gamer touched base with Roland Perry, a computer engineer who designed the innards of the Amstrad CPC

Who is Roland Perry?

Having started work in computing when the first 8-bit microprocessors came into being in 1974, Roland Perry found himself working at Amstrad in the early Eighties. As the lead designer of the CPC 464 – which was launched in April 1984, exactly 30 years ago – Perry also spearheaded the 664 and 6128 and, in 1990, was instrumental in developing the Amstrad 464 and 6128 Plus as well as the GX4000 console.



» [Amstrad CPC] *Harrier Attack* was a favourite game of the Amsoft crew.

Which Amstrad CPC game would you recommend to our readers and why?
By far the most popular early game amongst the Amsoft crew was *Harrier Attack*. We much preferred games that you used a joystick for. Later in the project, my favourite game was *Roland In Time*, most of the programming for which was done on some bench space in Brentwood House that we let the author use.



» [Amstrad CPC] *Roland On The Ropes* was one of the better games from Amsoft.

Which CPC model would you recommend?
I thought the 6128 was the best of the range and taught people to program as well as just play games (I spent a great deal of time ensuring the User Manual was skewed in that direction).

There was also a firmware manual with a lot of technical detail. Why was this manual published?
One reason for having so much technical detail available, and publishing the Firmware Manual, was so that third parties could develop things without having to keep coming back and asking questions.

What sort of questions would third parties ask you?
Once we had launched each machine, we spent very little time working on additional accessories. I remember being pestered by numerous dealers to add a light pen to the range, but we had plenty to do just getting the new models ready for the next season.

What was it like working on the CPC – did you consider what rivals were doing?
We just did what needed to be done at the time. Perhaps not having favourites and not looking over our shoulder at everyone else may have been one of the reasons we achieved what we did.

» [Amstrad CPC] Platforming fun with lots of lives – each one desperately needed.



What computers did the Amstrad team use themselves prior to building the CPC?
Most of the team did not have their own games computer or console at home, although I was very familiar with a number of them from having written magazine reviews. I think this helped keep us focused on building what we wanted to build. Looking back to pre-*PCW* days, one question rarely asked is 'what did we use to write our memos, edit the User Manual, and so on'. The answer is a multi-user multi-Z80 business computer using an operating system called TurboDOS. I had done the system integration for the model we bought a couple of years earlier, before returning to the Brentwood area. The supplier hand-built the machine using bought-in cards but locally manufactured backplane, cases and power supplies.

Amstrad brought out the Plus range and the GX4000 console. Why do you think they didn't work out in hindsight?
Most likely because it was 8-bit when the cool thing to have was 16-bit.

Was any other hardware upgrade considered for the CPC?
At one time we were considering enhancing the CPC to have 64 colours, which meant giving (even more) names to them all, like we already had with Magenta, Light Magenta and Pastel Magenta and so on. One of the new colours would have been Deep Purple. I always regretted missing the opportunity to put that in the manual.

What's your best memory of being in the games industry in the early days?
Very early on in the project I took a minibus-full of the team to a Sinclair show on a Sunday at Alexandra Palace, to see the excitement and range of aftermarket products that were available. I predicted that one day there would be a CPC show, but I think I was the only one who really believed it at the time.

Did you get on with the computing press?
We gave in-house review facilities to a number of journalists, who loved it because they could ask me in person all sorts of questions about the product, and I always gave them honest (and printable) answers, so it worked well for both of us. Other companies tended to handle their reviews at arms length through a PR agency.

Can you share one interesting anecdote about your time in the industry?
We asked Guy Kewney [writer for *Personal Computer World* and thought to be the UK's first technology journalist] to do the first review of the Amstrad CPC in our office, and he turned up wearing running shorts. Most of the Amstrad management wore suits and took things very seriously; it was years before Guy was able to live this episode down. *


THE NEW NAME FOR XBOX 360
www.XB1.co.uk
FREE POSTER FOR ELDER SCROLLS AND WATCH DOGS
XBOX ONE
Available from all good newsagents and supermarkets
ON SALE NOW
WATCH DOGS EXCLUSIVE | XBOX 360'S HIDDEN GEMS | TITANFALL GUIDE | BIOWARE ON DRAGON AGE
BIGGEST EXCLUSIVES
TRUSTWORTHY REVIEWS
THE BEST INDUSTRY ACCESS
GREATEST REVEALS
EXCLUSIVE VIDEO CONTENT
BUY YOUR ISSUE TODAY
Print edition available at www.imagineshop.co.uk
Digital edition available at www.greatdigitalmags.com
Available on the following platforms
Print
Tablet
Phone
Desktop
facebook.com/XONEmagazine
twitter.com/@XONE_magazine

ZARCH

Zarch was born of a setback viewed as an opportunity. Rory Milne asks David Braben how Elite's stalled sequel and Acorn's prototype hardware led him to create a 32-bit classic for Superior Software



IN THE KNOW

- » **PUBLISHER:** SUPERIOR SOFTWARE
- » **DEVELOPER:** DAVID BRABEN
- » **RELEASED:** 1987
- » **PLATFORM:** ACORN ARCHIMEDES
- » **GENRE:** SHOOT-'EM-UP

The British home computers launched in 1985 were products of consolidation rather than innovation. While US firms Commodore and Atari were exciting consumers with 16-bit systems, UK stalwarts Sinclair and Amstrad were offering households enhanced versions of machines from their 8-bit portfolios. However, behind the scenes of a third British heavyweight, work was underway on a project that would leapfrog the competition on both sides of the pond and provide David Braben with a platform for a second classic.

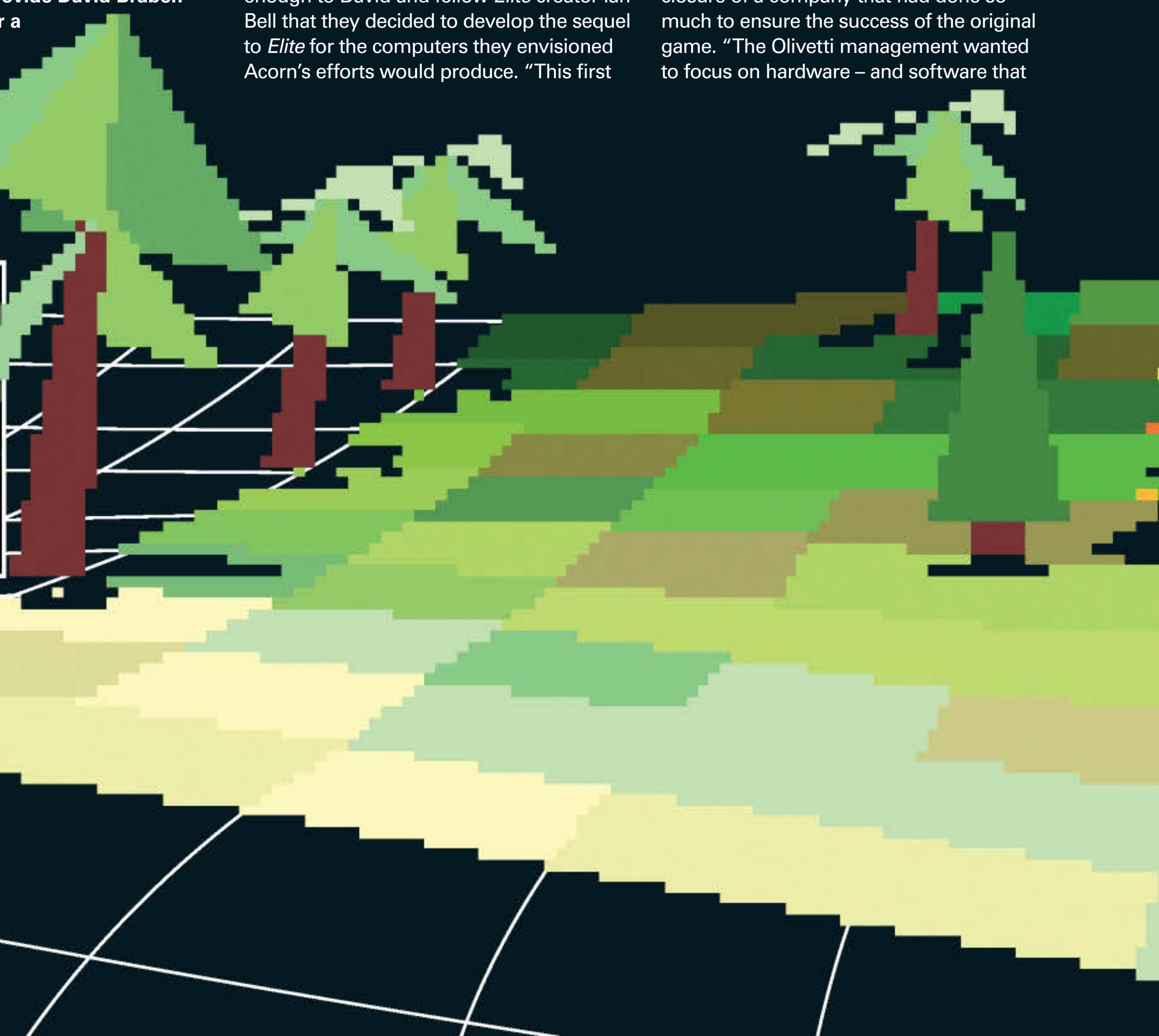
"I was unofficially aware of the Acorn 'Project A' program in late 1985/early 1986," remembers David. "At that time it was a skunk-works development for a new chip for a replacement BBC Micro. A number of different chips had been tried in external 'second processor' units, including a second faster 6502, a Z80, and a few others I think. The units sat alongside the BBC Micro, connected to them by a fast link – well, fast for the time – called the 'tube'."

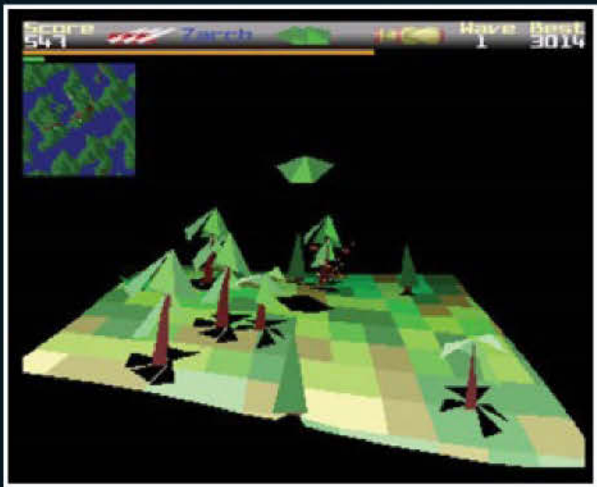
Although still 8-bit in nature, Acorn's 'second processor' project was attractive enough to David and fellow *Elite* creator Ian Bell that they decided to develop the sequel to *Elite* for the computers they envisioned Acorn's efforts would produce. "This first *Elite* sequel was for [the] 8-bit machines that didn't go forwards," David begins. "Ian and I had split the work on this early sequel between us, but Ian had become less keen on continuing. The more I worked on it the more I thought of new techniques that simply wouldn't work on these machines. This was an extra impetus to move from the constraints of 8-bit development."

And as if David needed a sign that that the universe wasn't yet ready for a second *Elite*, a takeover of the Acorn group by Italian computer firm Olivetti led to the closure of a company that had done so much to ensure the success of the original game. "The Olivetti management wanted to focus on hardware – and software that

» [Archimedes] The infamous *Lander* opening scene – you have to fly directly upwards or your shuttle explodes.







» [Archimedes] A peaceful land, but red on the radar represents infected areas.



» [Archimedes] *Zarch*'s world begins to turn red as two Seeders fill the air with deadly spores.



» [Archimedes] An early version of the *Zarch* graphics engine powered David Braben's Union Jack demo.

would directly drive hardware sales, eg productivity software," explains Chris Jordan, former Acornsoft publications editor. "Acornsoft as such ceased in 1986. Acorn used the Acornsoft name on a few subsequent products of its own, but these were only business or program development titles."

Following the doors being closed at Acornsoft, a deal was done by Acorn to share the Acornsoft name with one of the former publisher's closest rivals. "In 1986, Superior Software and Acorn made an agreement to republish some of Acornsoft's BBC Micro and Acorn Electron software titles under a joint Superior Software/ Acornsoft brand," recollects Richard Hanson, former Superior Software director. "By that time, I think Acorn's management had essentially decided that they didn't want to continue with marketing/publishing games software."

So the Acornsoft team that launched *Elite* had disbanded and progress on its sequel had stalled, but Acorn's focus on hardware was about to present David with a reason to start a new project – one he would call *Lander*. "I first saw an ARM CPU – then it stood for 'Acorn Risc Machine' – in a 'second processor' unit," David recalls. "It [was] one of the very first ARM chips. Later I got one of the first CMOS 'second processor' units to play around with, and wrote a number of demos, then started *Lander*. At this point I got an A500 – an amazing machine with an incredible 4Mb of RAM. The availability of a prototype 32-bit machine was a great opportunity for me, together with giving Ian the chance to decide what he wanted to do going forwards."

It was early 1987 by the time David received his A500, and it came with one condition: Acorn wanted something to show off the 32-bit computer it planned to launch in June. *Lander* was the obvious choice, but this left David little time to deliver a fully featured game. But *Lander* would give a taste of what was to come, and for inspiration David looked to an unpublished title of his written years earlier for an Acorn kit computer. "Effectively *Lander* was a demo – a snapshot at around halfway through development. This is because the code had to go off to be ▶

"Effectively Lander was a demo – a snapshot at around halfway through development"
David Braben

BOLDLY BRABEN

David Braben does like his space games…

***Elite* is where is all began. Co-authored by Ian Bell, this hugely successful slice of open-world space trading was developed for the BBC Micro in 1984, before being adapted for almost every popular home computer of the day – as well as the NES. The space love continued with *Virus*, which was released in 1988.** Because the ST and Amiga enjoyed more success than Acorn's Archimedes, *Virus* – the 16-bit version of *Zarch* – is generally better known than its predecessor. *Virus* plays almost identically to *Zarch* but your ship is slightly easier to control.

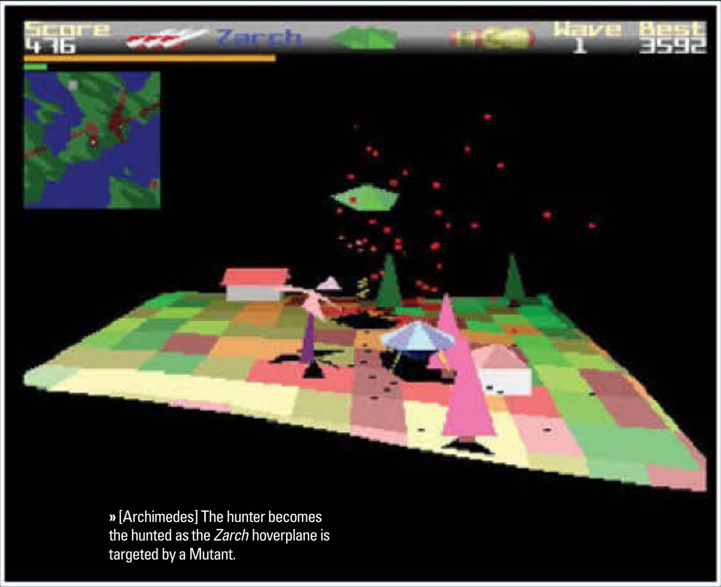
The success of *Elite* saw *Frontier: Elite II*, appear in 1993. While it vastly improves on the visuals and scale of the original *Elite*, comparatively, *Frontier* offers less structured and more freeform gameplay than *Elite*.

Darxide was released for the 32X in 1995, being a joint project between David and Peter Irvin, It's a high-octane third-person re-imagining of the Atari classic *Asteroids* and made great use of the 32X's texture mapping. It's now incredibly expensive to buy. *Frontier: First Encounters*, released the same year, is Braben's third *Elite* game. It makes notable changes to the *Elite* formula, with in-game journals and reports on the *Elite* universe, while missions are more defined storyline-led affairs.

V2000 was released in 1998 and is an excellent, seemingly forgotten sequel to *Zarch* that reached both the PlayStation and PC. That leaves us with the incoming *Elite: Dangerous*, that sees Braben return to the series that helped make his name. Expect it to land later this year.







» [Archimedes] The hunter becomes the hunted as the *Zarch* hoverplane is targeted by a Mutant.

duplicated and packed in with the machines. The unreleased *Meteors* was probably the biggest influence. *Meteors* was the first game I wrote that ran at a solid 50 fps, which was an achievement on the Atom. In this 2D shooter, the player controlled a ship that fell down the screen until the player thrusted. As boulders came down, they would hit the ground and split, then the smaller bits would in turn split. Each would take a bite out of the landscape, so pretty soon the landscape was very pockmarked and would gradually get eroded. With *Lander*, I planned to do the same with the cratering, but it wouldn't have added as much in the game."

The falling rocks in *Lander* may not have caused craters, but in other respects the game was David's 2D Atom title re-imagined in glorious 3D filled polygons. A multi-hued patchwork landscape rolled out to meet *Lander*'s virtual horizon beneath a sea of stars waiting to be explored by those skilful enough to fly the game's highly volatile shuttle. Fuel was limited – with refuelling an accomplished act of piloting; shooting trees and buildings increased your score – but each bullet spent cost you a point; and showers of polygon rocks rained down on anyone who managed to score highly. In short, *Lander* offered classic risk and reward gaming. Those that played *Lander* on Acorn's newly launched computer – the Archimedes – were also witnessing an accomplished tech demo, making it easy for Acorn to make *Lander* an exception to its rule of not publishing games. "*Lander* was in a different category for Acorn because it was bundled free with the Acorn Archimedes computer," Richard Hanson explains, "it was considered part of the whole Acorn Archimedes package rather than standalone software. It was [also] a demonstration of the speed and graphics capabilities of the Archimedes."

Lander had required David to hit the ground running, and the evolution of his code after he provided Acorn with the demo saw him keep to this brisk pace. He enhanced his work in progress with invading aliens bent on infecting the game's patchwork world with a virus, and he employed proven mechanics to facilitate cosmic dogfights inspired by his favourite coin-ops. The game that was evolving from *Lander* was also given a name, although perhaps not one that David would have chosen himself. "One of the management team at Acorn chose the name 'Zarch' as a kind of link to the name of their new 'Archimedes' computer – the first four letters of the 'Archimedes' name with another letter preceding those four," Richard reveals. "I think calling it 'Virus' would have been better," is David's take. "Developing *Lander* and *Zarch* – they shared a common code base – took about three months, from memory," David continues, "the two games were developed as one. The gameplay did work very differently, but to be honest this aspect of both games was quite simple, especially by today's standards. I had a bit longer with *Zarch*, as this was standalone. I added the AIs, improved the level structure and optimised the rendering some more. With a game like *Zarch*, it was important that the frame rate was pretty high. I wanted the feel of managed chaos you got in *Defender* and *Galaxian* as waves of attackers came down and you needed a strategy to avoid them – mainly not staying still but also protecting your underlying world from destruction by prioritising your attacks. I liked the fact in *Defender* that the

> **"Meteors ran at a solid 50 fps, which was an achievement on the Atom"**
> David Braben

3D GROUND BREAKERS

More 3D games that broke the graphical mould



BATTLEZONE

SYSTEM: ARCADE
YEAR: 1980

■ Ed Rotberg's coin-op tank sim was one of the earliest videogames to use semi-realistic first-person 3D graphics in order to give gamers a virtual open world to play in. *Battlezone*'s imposing wire-frame vector graphic models wowed early-Eighties arcade visitors far more used to simple sprite-based visuals.



3D MONSTER MAZE

SYSTEM: ZX81
YEAR: 1982

■ As impressive as it is for any home computer to have hosted a 3D experience in 1982, it's almost beyond belief that Malcolm Evans squeezed *3D Monster Maze* into a humble ZX81. Just as noteworthy as Malcolm's maze is the scary monster he let loose in it.



KNIGHT LORE

SYSTEM: ZX SPECTRUM
YEAR: 1984

■ Ultimate's isometric flick-screen style seemed revolutionary when *Knight Lore* was first unveiled to the gaming public. The game and its graphics engine were so popular and were imitated to such an extent that for a while the titles it inspired formed a faux-3D sub-genre of arcade adventuring.



» [Archimedes] The *Zarch* hoverplane has a Mutant in its sights but must skilfully avoid a Pest.



» [Archimedes] When you reach 800 points, *Lander* introduces the additional hazard of falling rocks into play.



» [Archimedes] Misjudging velocity and trajectory results in the *Zarch* hoverplane speeding past its targets.

'Landers' were the least dangerous bad guy, but that by abducting the humans they had a profound affect on your progress. I loved the idea that alien enemies could change when infected – that [in *Defender*] the 'Landers' turn into 'Mutants' – so it started me thinking about infections. I was pleased with the way the [virus] mechanic [in *Zarch*] worked. I loved the way the world changed, in a slightly bizarre take on destruction; where the *destroyed* version was actually more colourful, more of an alien world – which was exactly what I had hoped for."

Like *Lander*, the ship the player flew in *Zarch* was far from easy to control, with beginners being forgiven for thinking they were piloting a firework, but the game's attract screen demonstrated that practice made perfect. "The problem was that once you did get 'into the zone' with the game, and the numbers and types of enemies gradually increased, the game needed something else to throw at you, to give the pilots a great sense of achievement and memorable milestones – like reaching the hillier terrains or the higher gravity levels. The controls did both make and break the game for some. That satisfaction point felt really good, but some never made it. The AI demo was a good way to show the player what would happen, but also provided a huge amount of play-testing of the game. The AI genuinely played the game using the same controls as the player, so it was a great way to flush out any issues too. It was mostly me playing it. This is perhaps why it was so hard in the end!"



» [Archimedes] A Seeder dodges a hail of bullets as it flits over the seas of *Zarch*.

David – and *Zarch* itself – may have taken care of most of the game's play-testing, but Acorn's no-games policy would result in a third-party putting *Zarch* through its paces – as well as making a few suggestions. "Acorn presented Superior Software with *Zarch* for the Acorn Archimedes computer; they asked us to publish *Zarch* under the Superior Software/Acornsoft brandname, and we were delighted to do so," Richard enthuses. "The impression was that Acorn had wanted to keep *Zarch* confidential until it was in a reasonably advanced stage ready for us to consider. Some of Superior's staff and I play-tested *Zarch*, then gave some feedback. The two main suggestions I made were the addition of a display panel and the inclusion of some kind of rare event in the game: for this aspect, David Braben included a sea monster, which occasionally appears as the game is being played."

With these finishing touches having been made, the one remaining consideration for Richard was to arrange cover-art. "It was produced by the graphic design team called Ellis Ives Sprowell. They produced some excellent graphical work for Superior, and the *Zarch* design is among their best. I was involved with the design process in terms of some of the basic concepts, and they produced the graphics based on the ideas that we initially discussed."

Zarch was well received when unveiled at an Acorn user show in London and reviewed well – especially in *ACE* magazine, which awarded the game 979 out 1,000. "I was very pleased with both the level of acclaim, which the game well deserved, and the sales achieved by *Zarch*," beams Richard. "It was a groundbreaking game, which still appeals today; and I was certainly proud to publish it on the Superior/Acornsoft label."

David Braben's last word, meanwhile, gives hope to all those dreaming of a *Zarch* reboot of some sort, perhaps following on from his upcoming *Elite: Dangerous* Kickstarter-funded project. "There is always scope," David teases, before adding, "yes, it might make sense at some point."

Many thanks to David Braben, Richard Hanson and Chris Jordan for their time and invaluable input.



DEVELOPER HIGHLIGHTS

ELITE
SYSTEM: BBC MICRO, VARIOUS
YEAR: 1984

DARXIDE
SYSTEM: SEGA 32X
YEAR: 1995

V2000 (PICTURED)
SYSTEM: PC, PLAYSTATION
YEAR: 1998



I, ROBOT
SYSTEM: ARCADE
YEAR: 1984

■ Although better known for the apocalyptic *Missile Command* and the cosmic shooter *Tempest*, Dave Theurer is also responsible for the underrated *I, Robot*. Dave's multi-directional shoot-'em-up holds the honour of being the first commercial game featuring filled 3D polygon graphics.



VIRTUA FIGHTER
SYSTEM: ARCADE
YEAR: 1993

■ In many ways, Yu Suzuki's *Virtua Fighter* could potentially be viewed as an evolution of his earlier title *Virtua Racing*. But the way Yu's combatants move within a 3D space is almost balletic, and this earliest of polygon fighting games set a gold standard for the contemporary generation of third-person fighters.



MARIO 64
SYSTEM: N64
YEAR: 1996

■ Aside from bringing Nintendo's intrepid mascot into the third dimension, *Mario 64* provided a template for 3D platforming and open-world exploration. Crucially, Shigeru Miyamoto's team gifted Mario's first polygon-powered outing with a dynamically adjusting camera system, which has since become a staple component of 3D game design.

IMPORT ONLY

GAME ORIGIN



» **COUNTRY:** JAPAN
» **POPULATION:** 127 MILLION
» **CAPITAL:** TOKYO
» **NATIONAL LANGUAGE:** JAPANESE
» **CURRENCY:** YEN
» **TIME ZONE:** UTC+9

» **CO-ORDINATES:** 36°0000' N 128°0000' E

INFO



» **PUBLISHER:** SQUARESOFT
» **DEVELOPER:** SQUARESOFT
» **SYSTEM:** SUPER FAMICOM
» **ALSO ON:** N/A
» **GENRE:** RPG
» **RELEASED:** 1994
» **EXPECT TO PAY:** £35-50 BOXED, £10-15 CART ONLY

EVOLUTION OF THE GENRE

▲ **Retro**



FIRE EMBLEM: SHADOW DRAGON AND THE BLADE OF LIGHT
RELEASED: **1990**
With a fusion of turn-based RPG combat and a strategy-style tactical map, Nintendo was once again at the forefront of defining a genre with the release of *Fire Emblem*. Too bad none of the early games ever made it across the water…

▼ **Modern**



DISGAEA 4: A PROMISE UNFORGOTTEN
RELEASED: **2011**
While Nippon Ichi's primary focuses are clearly complex maps and ludicrous numbers, narrative also plays a huge part in the studio's output. If you want an in-depth strategy RPG with some degree of storytelling, there's one name that you can trust, and that name is *Disgaea*.

LIVE A LIVE

» SQUARESOFT'S PROLIFIC 16-BIT RUN GAVE THE GAMING WORLD SOME TIMELESS CLASSICS, SURE. BUT IT ALSO PRODUCED A NUMBER OF CURIOUS TITLES WHICH, DUE TO TIMINGS AND LOCALISATION DECISIONS, WOULD NEVER MAKE IT OUT OF JAPAN. LUKE ALBIGÉS REFLECTS ON ONE SUCH LOST ODDITY…



» [Super Famicom] Movement around the combat grid is free, but step into an opponent's attack range and they'll inevitably open fire.

Genre today isn't nearly so quantifiable a thing as it was back in the day. These days, when even shooters and sports games are drafting in RPG mechanics and so many developers elect to spice things up with a little bit of MMO/free-to-play seasoning, there's arguably not even such a thing as genre any more. The lines between different kinds of mechanics and styles have blurred to the point of non-existence and even though it's tricky to do one genre extremely well, that doesn't stop even the least likely developers having a crack at making a game that is all games at once, then inevitably failing.

But back before the genre walls had been smashed to pieces by strings of ingenious and/or desperate developers, things were so much easier to define. Beat-'em-ups had their fireball motions, multiplayer focus and awkward racial stereotypes; puzzle games centred around matching three of something for no other purpose than continually, *infinitely* matching three of something; RPGs were the only archetype where showing the game's internal workings on-screen in numerical form wasn't flagged up as a bug but celebrated. And with all this in mind, Squaresoft's episodic experiment with *Live A Live* was all the more important – it took one central genre (the booming tactical RPG, popularised by the likes of *Fire Emblem*, *Super Robot Wars* and *Shining Force*) and distilled it into nine flavours in the space of a single game.

Unlike so many RPGs, *Live A Live*'s first choice isn't what to name your character (that's the second choice, silly) but which time period to tackle first. Seven of the game's nine chapters are unlocked from the off and can be tackled in any order, but you're given nothing more than a crude pixel drawing of the protagonist and a brief synopsis to go on at this point. What the game doesn't tell you here is just how radically different each time frame is on a gameplay level. Combat is the glue that binds the whole thing together – a simple yet effective RPG variant on a strategy-style turn-based grid – but tone and player involvement shift massively between chapters. The sci-fi setting, for instance, offers virtually no combat outside of the main boss encounter and can almost be seen as an early visual novel, while the modern day chapter is a



» [Super Famicom] Time periods can be selected in any order and initially seem unconnected. Two closing chapters bring the whole thing together, though.

relentless, clearly beat-'em-up-inspired string of boss battles. The middle ground chapters are where the game is at its best, as should be obvious from the rest of Squaresoft's SNES output – the team knew how to balance story and combat brilliantly – but that doesn't stop each and every one of *Live A Live*'s primary stories from being interesting.

Format changes aren't just mechanical, you see. For the prehistoric section, for instance, dialogue is canned in favour of vague chat icons and body language to suggest the animalistic caveman grunts and groans that would have passed for language back before MySpace was a thing. Each of the seven core stories feels different, thanks to a clever combination of gameplay additions, pacing changes and mechanical tweaks – there's enough common ground to keep you invested in the basic principles but enough else going on that the unique flavour of each segment can filter through. While interesting, the core combat system isn't actually all that amazing – couple this with middling domestic review scores and the game's late arrival, on the eve of PlayStation, and you've got your reasons for it never managing to escape Japan – but the fact that Square somehow copes with applying it to nine different settings (and with a different angle for each) is what makes *Live A Live* truly stand out.

Well, that and the air of mystery that surrounds the whole thing. Videogames aren't exactly well known for their subtlety or grace, so most people probably end up looking for reasons for these stories to be connected long before one is actually offered. And as is sadly often the case, your little *Poirot* mindventure will most likely reach some bizarre conclusion that turns out to be far more interesting than the actual connecting rod. All the same, the ambition of trying to tie together such seemingly unconnected narrative arcs by way of a middling tactical RPG can only be saluted.

In fact, it's not so much the gameplay that demands celebration here as the early revelation that games needn't be pigeonholed. *Live A Live* is a decent game, but its primary thrill comes from seeing how a basic concept can be adapted and reworked to fit numerous templates. Reliance on focus groups and du jour subject matter today mean that it's unlikely we'll ever see such a radical game again (especially not after the chronically misunderstood *Nier*), which only makes it all the more bitter that we never really saw the first time around either. *

GO DEEPER
All in the details



SAY WHAT?
» Can't read Japanese? There's a decent fan translation out there, so you can enjoy *Live A Live* even without the most basic knowledge of its native language.

DETAIL OVERLOAD
» Square was able to really go to town on environmental detail. Settings and backdrops are on a par with some of the 16-bit era's most impressive views.

LITTLE PEOPLE
» Each segment boasts a different guest illustrator. Their styles and efforts aren't too obvious from the small map sprites, but the larger battle character images show off the personality better.

I AM ERA
» Each time period has a distinct look as well as its own unique gameplay gimmicks. The seven starting ones all feel different, before two final chapters tie it all together.

IT'S ABOUT TIME
» Gameplay can change between areas and eras. Each sets out its stall well, though, and there's little in the way of mechanical surprises once the basics for a period have been established.

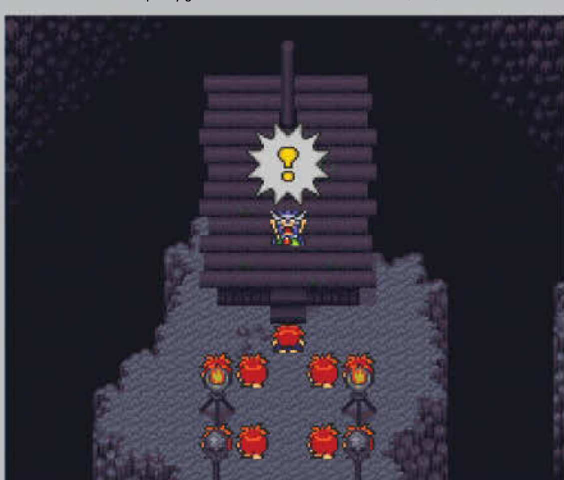
> "Each of the seven core stories feels different, thanks to a clever combination of gameplay additions, pacing changes and mechanical tweaks"



» [Super Famicom] It's playable without, but the fan translation is a pretty good one.



» [Super Famicom] The modern day section is just a beat-'em-up inspired boss rush.



» [Super Famicom] Not all of the segments even require translation – the prehistoric chapter plays out almost entirely with emotes and symbols in place of dialogue.

CAN'T IMPORT? YOU COULD TRY



CHRONO TRIGGER

» Squaresoft's time-hopping RPG might once have been another Import Only itself, were it not for the fact that years of ports and conversions have made it far more accessible to European audiences. It's not especially similar on a gameplay level – things like *Arc The Lad* and *Wild Arms* are perhaps closer there – but when we're discussing an RPG that spans multiple time periods, there's only one reference point we're ever going to go to, and it's this wonderful one right here.

25 YEARS

BOY WONDER

A GAME BOY RETROSPECTIVE

It's been 25 years since the world first glimpsed the Game Boy, the creation of veteran designer Gunpei Yokoi and his team at Nintendo. To celebrate its birthday, Retro Gamer looks back at that most modest of handhelds and finds out what made it such a massive success

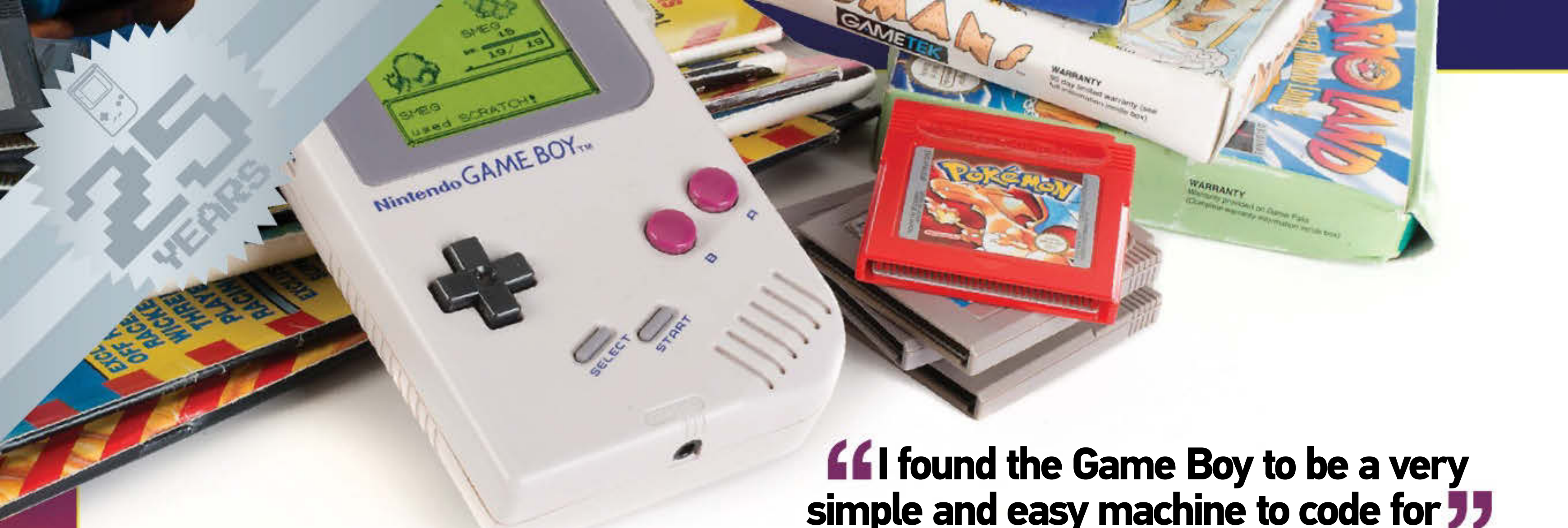
It's often said that there are no surprises in gaming anymore. In this connected age we now know everything, instantly. The days of walking into a shop and being blindsided by new gaming hardware and software are dead and gone.

But things haven't really changed that much. It was just less immediate in the past, with gamers having to rely on magazines drip-feeding information about exciting new products. This was certainly the case with the Game Boy, the Nintendo handheld that launched in Japan in April 1989 and the US shortly after but wouldn't arrive in Europe until September 1990. The long-running and respected UK magazine *Computer & Video Games* dropped the first details in its May 1989 issue, calling Nintendo's new machine a "micro-marvel". There was a product image too, allowing readers to scrutinise its key characteristics: the D-pad and button configuration, the grey-coloured shell, the yellowy-green screen. Displayed on the screen was a little something called *Super Mario Land*.

It wasn't possible to judge the size however. There were no hands gripping the Game Boy for comparison. All was revealed in the July 1989 issue of *C&VG* when deputy editor Julian Rignall got his own hands on a Japanese Game Boy for an import review. "There's a new Nintendo console in town," wrote Jaz. "It fits comfortably in the palm of your hand, has its own tiny TV screen, and the games come on cartridges the size of a matchbox. Sounds too good to be true?"

Happily Jaz revealed that the Game Boy was not just real but rather quite brilliant. "The console fits in your hand perfectly," he remarked. "Playing games on it is a joy!" While he praised the sharpness of the graphics on the LCD screen, he did note blurry scrolling as a caveat. It was revealed that the handheld was powered by four AA batteries, but no mention of how many hours of play they offered (clearly Jaz wasn't changing them often enough for it to be regarded as an issue). Meanwhile, key Japanese launch title *Super Mario Land* was described as "unbelievably addictive". The review ended with some impressive sales claims from Japan – 500,000 units sold to date, with 300,000 snapped up at launch. Elsewhere in the issue the Game Boy was called "The future of handheld gaming". As Jaz's review was a UK exclusive you could forgive *C&VG* for laying it on thick, yet that statement would turn out to be beautifully prophetic.


OFF·ON
DOT MATRIX WITH STEREO SOUND
SCORE
377
LEVEL
6
LINES
1
BATTERY
Nintendo GAME BOY™
B
SELECT
START
PHONES



> **"I found the Game Boy to be a very simple and easy machine to code for"**
> R-Type II programmer Bob Pape

When the Game Boy finally arrived in Europe, almost 18 months after its Japanese debut, there were just half-a-dozen games released alongside it. Of these, *Super Mario Land*, *Tennis* and *Golf* were the must-have titles. One title you didn't have to buy was the revelatory Game Boy version of *Tetris* as it came bundled with the console. This smart move had worked wonders for Nintendo in the US, leading to stellar sales (a reported million units were sold within weeks of its launch). European gamers could now dream of falling blocks too as *Tetris* fever took hold. It really was the perfect pack-in – the ultimate game on the go.

The success of the hardware quickly led to flood of fresh software that identified the Game Boy as a diminutive yet capable contender that could punch above its weight (which was a lean 300g including batteries, if you were wondering). In its first couple of years the handheld was home to some fantastic original titles such as pinball sim *Revenge Of The 'Gator*, platform adventure *Gargoyle's Quest*, and the Game Boy exclusive sequel *Metroid II: Return Of Samus*. There was also plenty of decent and undeniably attractive licensed fare like *Teenage Mutant Ninja Turtles*, *RoboCop* and *Batman*. Coin-ops were converted too with varying results, as you might expect, although *Double Dragon*, *Nemesis* and *R-Type* were all admirable attempts.

The Game Boy's custom processor, which was essentially a Z80 with some bits missing and others added, ensured that many programmers could move over to the machine with little problem. Bob Pape, who coded the celebrated Spectrum version of *R-Type*, went on to develop *R-Type II* for the handheld. "I found the Game Boy to be a very simple and easy machine to code for," he says. "The hardware of course had limitations but then that was the same for all early 8-bit consoles and computers. Some people may have had problems dealing with the limited instruction set of the custom Sharp processor that the Game Boy used, compared to the Z80, but I think for those programmers who were used to having to scratch for every last byte out of a 1K ZX81 or 48K Spectrum through tight coding then it was almost like coming home."

In the past Nintendo has been accused of providing developers with vague or incomplete documentation, but in Bob's experience this wasn't too much of an issue as the hardware was pretty much an open book. "Well if you don't know what's missing then you can't say it's not there!" he comments. "It's more likely that certain coding techniques were kept quiet to give companies an edge, things like how to multiplex the sprites or give the appearance of seven shades of grey. Other ways of programming the hardware were so obvious they didn't need documenting."

Another Z80 developer who gladly moved over to the Game Boy was Ken Murfitt. "In many ways the Game Boy was easier to program that the other Z80 platforms," says Ken, who came chiefly from a Amstrad CPC background and developed *Double Dragon 3* and *The Lawnmower Man* for the Game



» You won't get very far without using these.

MUSCIAL INTERLUDE

Jonathan Dunn composed for many Game Boy titles, including the RoboCop theme used on that washing machine advert…



» Music man Jonathan Dunn.

What were your immediate thoughts on the Game Boy as a gaming platform?
When I first tried a Game Boy I thought it was a great little device. Of course the first thing I played was *Tetris* and I was hooked. I also remember that you could connect two Game Boys together and play two-player *Tetris*. That was the first time I'd seen anything like that.

How would you rate the Game Boy's audio capabilities?
The Game Boy had some interesting characteristics. It had a waveform that you could program yourself – 32 4-bit samples that you could define. I remember getting it to make some unusual noises. I also liked the fact that you had some control of stereo placement, though I wish I'd used that a bit more in the work I did. Quite often the stuff I did for the Game Boy was a port from another version so I didn't get to spend enough time experimenting with the possibilities.

» [Game Boy] *RoboCop*. Great game, superb soundtrack.



Did you encounter any technical challenges at all?
I coded my own driver for the C64 and NES and SNES, but at the time didn't have enough knowledge of Z80 to do the audio driver that we needed. So Ocean's John Brandwood was roped in to convert the Spectrum driver, with a few modifications. I wasn't happy with the hardware volume envelopes, so I got John to add a more versatile software envelope system that gave me more accurate control. It had disadvantages as we effectively reduced the bit resolution of the volume, but it did allow me to sync the envelopes with other note-based events.

Your *RoboCop* title theme is still used and sampled to this day.



» Programmer Ken Murfitt is seen here developing Game Boy games at The Sales Curve in London in 1992. He says: "The wide ribbon connector coming out of the PC was plugged into the cartridge slot of a retail Game Boy. Inside the PC was a card that simulated the various cartridge sizes. So there was no emulation as such – you would test and play the game on the Game Boy itself. On the PC, I typed in the actual assembly code using a PC text editor called Brief. It was assembled into machine code and the binary image was downloaded to the memory on the PC card. At this point the Game Boy sees the new game image as a cartridge and begins to execute it. It would usually take me about nine months to finish a Game Boy title."



» [Game Boy] *Tetris* was the Game Boy's killer app. It was the perfect fit for the new handheld.



» [Game Boy] *Tetris* went on to sell millions, benefiting nicely from being a pack-in title.

Boy on behalf of The Sales Curve. "It was exciting to use real sprite and background-scrolling hardware, after so many years of squeezing every last instruction out of platforms like the CPC and Spectrum. No more pre-shifted sprites that hog memory, sprite masking or the Z80 stack tricks required to perform background scrolling. You could just set up the sprite buffers one time and scrolling hardware registers once per frame and go. Obviously it was a step backwards in terms of colour count – there were four levels of grey against the Amstrad's palette of 27 colours. You could get in-between greys using flickering but it was visually distracting and so I preferred dithering."

So developing for the Game Boy wasn't particularly difficult for seasoned programmers, but Ken notes there were a couple of unexpected considerations. "The first was battery life. The processor was put to sleep using the HALT or STOP command after processing had been completed for a frame, and this would minimise battery drain until the next vertical blank, 60 times per second. It was surprising to me at the time that the battery life could be extended by saving power during these tiny slices of CPU down time."

And then there was the odd entity known as 'Version Zero Game Boy'. Ken explains: "There were these early production Game Boys of which only a few thousand units existed in the world and Nintendo insisted that any submitted title must run perfectly ▶

Does its continued popularity ever surprise you?
I don't think anyone could have guessed that the *RoboCop* theme would become so memorable. At the time it was just another game. It was the norm to produce stuff very quickly and there was always another project looming at Ocean, so you didn't really get time to think about it. If I look back at all the different versions of the same piece of music I had to do, I wonder how I did it. That tune in particular has been sampled a lot and it's great that it's still around.

Do you receive any payment when the *RoboCop* tune is used?
I now collect writer royalties whenever the track is used, though I didn't receive anything when it was used in the Ariston advert. I think Ocean thought it was just getting some free PR and marketing.

What are you up to these days?
For the last two years I've been living in Slovenia working as COO for a games company called IBZooT. I'm also the co-founder of Fatleg Games, a mobile games start-up. I still code, I still write music. It's fun to make small games for mobile. It feels a little like it did in the old days. You don't need massive teams to produce something fun.



» [Game Boy] *Hook* was another game that benefited from Jonathan's music.



» Not just any old Game Boy. This one, owned by **RG**'s Paul Drury, is signed by Alexey Pajitnov.

GAME BOY BOLT-ONS

Some of the not-so-silly accessories you could buy for your Game Boy

BATTERY PACK



■ Not the most exciting accessory, or most essential seeing as the Game Boy was the least power-hungry handheld. But when your AAs did finally give up, this add-on was good for up to ten hours of extra play. And if you were more likely to be found playing Game Boy at home, it also doubled as a handy AC adapter.

GAME LIGHT



■ The Game Boy was unplayable in low-light conditions so there was no shortage of third-party add-ons designed to brighten up the display. The Game Light from Nubi was one such solution that bolted on to the front of the screen. It required four AAs batteries so it was probably cheaper to find a decent light source instead.

AMPLIFIER



■ Another accessory from Nubi, this device plugged into the headphone socket at the bottom of the Game Boy and boosted the audio output. Sound was louder and also in stereo. With so many ridiculous-looking add-ons available for the Game Boy, this one deserved points for at least trying to match the Game Boy's style and form.

GB CAMERA

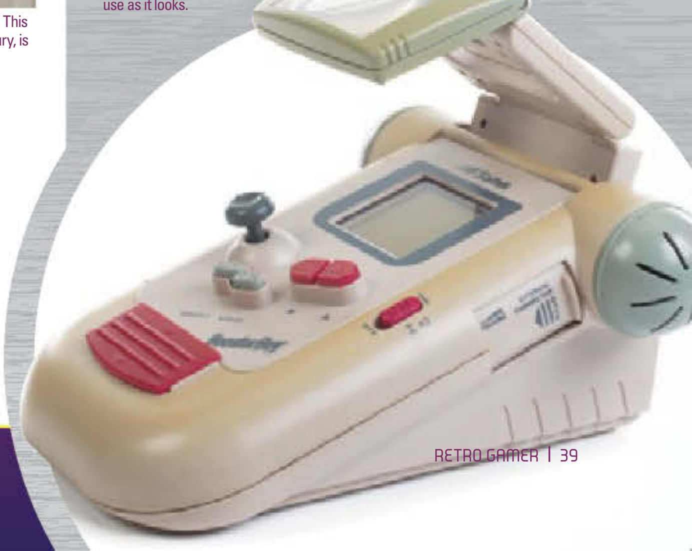


■ This quirky add-on was released in 1998 and turned the Game Boy into a compact digital camera (shortly before digital cameras became commonplace). In addition to snapping and reviewing photos, there were a number of built-in 'games' that would feature the player's grinning mug. They were borderline terrifying in all honesty.

GB PRINTER



■ If you had a burning desire to print the grainy, black and white photos you'd taken using the GB Camera then you clearly coveted this tiny thermal printer. Otherwise, a bunch of games supported the device, allowing you to print out high scores, screenshots and the like.



» Yes, the BoosterBoy is just as impractical to use as it looks.



» [Game Boy] Capcom's *Gargoyle's Quest* was a fun spin-off from arcade hit *Ghosts 'N' Goblins*.



» [Game Boy] If there was a craze then it was all over the Game Boy. There were three *Turtles* games in total.



» If you want to play multiplayer games or use peripherals you'll need this port.

on them. The difference was that the video memory was slightly slower in some respect and problems would be apparent with partially scrambled background tiles appearing in your game due to memory contention. It was a shame because it further restricted how many background blocks you could update during the video blank.

Due to the Game Boy's small screen and limited colour palette, it was the job of artists to ensure that the graphics, and in particular sprites, were as clear and defined as possible. It was a challenge that Elliot Curtis relished. Working for Tiertex Design Studios, he created Game Boy graphics for various Disney licences and *FIFA* entries. "To be offered the chance to make games on a console was a dream," he says. "Yes the Game Boy was limited but the other consoles at the time were actually a bigger struggle to create graphics for. The first time you created a sprite and saw it running on a Game Boy screen was amazing. It always looked way better than it did in Deluxe Paint!"

The biggest headache occurred when creating full-screen images, such as title screens, due to display limitations. "A Game Boy screen is divided into an eight-by-eight grid and each square in that grid is a character," he explains. "When you create a full-screen picture you can actually only use about 21 unique characters. It was nowhere near enough. We had tools from the coder to highlight individual characters once we drew anything, and then we had to be creative by using flipped and rotated characters within the picture. It's always depressing butchering a nice picture but often it was required assets for a licence and there wasn't any scope for creativity. Publisher or licence logos are boring enough to draw without spending all day editing them to make them actually work on the screen."

"Nintendo created games that worked well on a small screen with no colour"

Graphics artist Elliot Curtis

Elliot's later games were specially optimised for use with the Super Game Boy, the device that enabled Game Boy carts to be played on the Super Nintendo console, often with added colour. Explaining the process, Elliot says: "Colour would be designed into the graphics from the start. I would have four separate palettes of four colours each. I used to work on the Spectrum so the eight-by-eight character colour issues weren't new to me, but Super Game Boy graphics were a pain. The number of people who were ever going to actually see them was so small it seemed like a bit of a waste of time. I actually put a footballer in the border for *FIFA 98* in a Watford strip and got away with it!"

Super Game Boy games at least looked better in magazines – as anyone who tried to screen-grab original Game Boy titles will tell you. Nick Walkland worked on Europress's *GB Action*,



» [Game Boy] Bob Pape's *R-Type II* conversion was an improvement over its already fantastic predecessor.



» [Game Boy] Street brawler *Double Dragon 3* supported cooperative play on the Game Boy.



MULTIPLAYER ON THE MOVE

You had a Game Boy. Your friends had Game Boys. Game on!

Two Game Boys could be connected together using the link cable that was initially bundled with the handheld. Conveniently, pack-in title *Tetris* included a fantastic two-player mode where players battled it out as Mario and Luigi. It was simple but genius and elevated *Tetris* to even greater heights.

As most Game Boy owners had a cable, lots of titles included two-player support. Sports titles like *Tennis* and *Golf* offered gentle competition while fighting games such as *Mortal Kombat* and *Killer Instinct* let you go toe-to-toe with a pal. The two *Double Dragon* sequels allowed you to team up with a friend and clean up the streets together.

» [Game Boy] 'Epic' is not a word you'd ever associate with Game Boy games, but *Link's Awakening* came pretty close.



the UK's first dedicated Game Boy magazine which debuted in 1992. "Game Boy games were a complete pain to screen-grab," says Nick. "We actually took photos because it was so tricky. The Game Boy was placed in this glorified cardboard box, with a black cloth around the entrance, which you put your head inside. Like a Victorian snapper but without the phosphorous flash. But there was always motion blur and when you tried to pause games they tended to come up with a pause screen. To make matters worse the Game Boy looked, well, awful. A bland greeny-grey, with shades in-between."

Nick is not alone in his lack of love for the Game Boy. "It was awful!" laughs Ed Magnin, a programmer who'd previously worked for MicroProse and Cinemaware on Apple II and IIGS software before moving onto the Game Boy at Virgin Games. "The processor was like a Z80 but it wasn't a complete one, and there were banks of memory and the memory had to be switched in and out. So if you had a piece of artwork it wasn't just a question of whether it would fit into the cartridge, but where you had a hole to put it where it wouldn't straddle banks. You know, up until the Nintendo DS, I've always said that it was our job as programmers on Nintendo platforms to make bad technology look better than it should have."

Despite his aversions, Ed was responsible for the fantastic and faithful Game Boy version of *Prince Of Persia*. For this he also had to contend with Nintendo's famously dim view on videogame violence. "Nintendo had these policies where no-one ever died in a Nintendo game," he says. "So for *Prince Of Persia* the first thing we looked at was the slicer. We raised this and Nintendo said it was okay as long as we didn't show any blood. Even on the Game Boy they didn't want a big black puddle oozing out! The pop-up spikes on the floor were also a problem. Years later I found out that Nintendo didn't like what it called 'body deforming violence'. It was okay to get killed but not have the spikes popping out of your back."

For Ed and other developers, whether they were fans of the hardware or not, it was clear that Nintendo had devised a hugely popular platform. The Japanese firm had hit gold with the Game Boy. "It was my daughter who actually got me started on Nintendo," says Ed. "She was in kindergarten and I was out of work as the company I'd just finished a game for had gone out of business. It was hard to find a job and my daughter said 'Dad you should be doing Nintendo!'. And she was right. All of the kids had one!"



The Game Boy quickly established itself as the world's number one handheld, and this was in the face of competition from rival machines that arrived shortly after. The Atari Lynx, Sega Game Gear and PC Engine GT (TurboExpress), with their colour screens and superior hardware, looked like a clear generational leap over the Game Boy. It really was men against boys, on paper at least. But the Game Boy subverted expectations and emerged as the clear winner.



» Hear the Game Boy's music in all its glory. Or cover it with your hand.



» There's no back light on the original Game Boy, so adjusting the contrast is a must.



» The On button for the Game Boy also acts as a very handy cartridge lock. Not like they'd fall out…

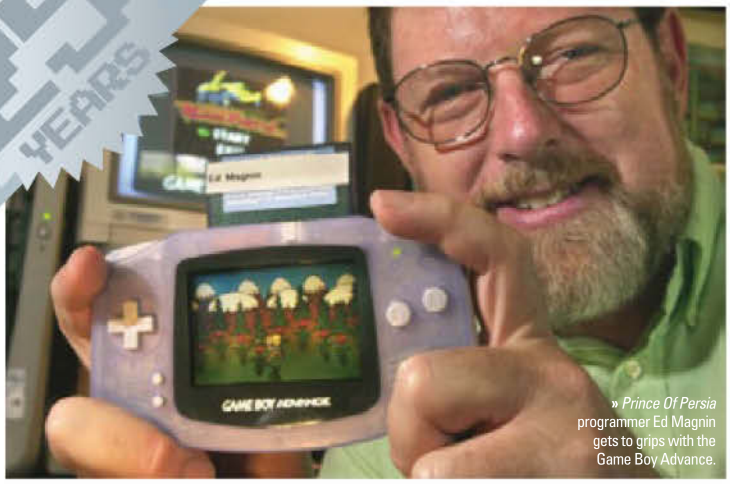
The reasons for its success are fourfold. Firstly, the Game Boy was the fastest to market so it was the first portable to capture the interest and imagination of the public. And not only was it first but it was the least expensive too. Prices obviously varied from region to region, but in anyone's language the Game Boy undercut the competition significantly. Further discounting would push the Game Boy towards an impulse purchase price point. The third factor was battery life. Four AA batteries would power the Game Boy for up to 15 hours (and possibly longer if the speaker wasn't too troubled). Rival handhelds were much hungrier, requiring more batteries and exhausting them far sooner. Having to continually buy or recharge batteries was never ideal.

Finally, and crucially, there was the Game Boy's vast library of games. More than 700 titles were released over a period of ten years. Third-party production was plentiful and Nintendo itself continued to support the machine throughout its lifespan. Three *Super Mario Land* sequels appeared in 1992, 1994 and 1998, while the release of *The Legend Of Zelda: Link's Awakening* in 1993 showed that the Game Boy could deftly entertain sprawling adventure games. There was a brace from ▶

Double Dragon 3 programmer Ken Murfitt reveals that developing co-op play was tough. "There were some interesting lessons," he says. "It required the efforts of myself and another programmer, Tom Prosser, to test the game – you couldn't flush out all of the synchronisation bugs by yourself. I learned about packets and timing issues. For example, no two Game Boys run at exactly 60Hz – one will be slightly slower. This may sound obvious now but you could not rely on only the vertical blank to synchronise your two-player game."

One of the most popular uses of the link cable was transferring Pokémon between the Red and Blue versions (if you were determined to catch 'em all then linking was mandatory). Battles could be staged between collectors too. A special four-player adapter was also available, although it was only supported by a small number of games. Notable titles included *F-1 Race* (with which the adapter was bundled), *Super RC Pro-Am* and *Gauntlet II*. A mention must also go to *Faceball 2000*, a Game Boy FPS that included support for up to 16 players!





» *Prince Of Persia* programmer Ed Magnin gets to grips with the Game Boy Advance.



» *Donkey Kong* (1994) featured enhanced graphics and a retro border when played on the Super Gamer Boy.

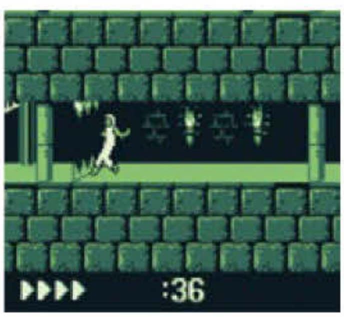


» [Game Boy] In *Gauntlet II*, four players could work together – just like in the arcades.

everyone's favourite gorilla too, with the arrival of *Donkey Kong* in 1994 and the first of Rare's *Donkey Kong Land* games in 1995. And just when the Game Boy was starting to look tired, along came *Pokémon* in 1996. The *Pocket Monsters* phenomenon ambled its way West over the next few years and gave the Game Boy a shot in the arm.

Nintendo would refresh the hardware too. The Game Boy Pocket arrived in 1996, sporting a sleek new form and clearer LCD screen. This was followed by the Game Boy Light in 1998, a Japanese exclusive that featured a backlit screen. The long anticipated colour screen Game Boy arrived later in the same year and effectively replaced the original model. Prior to the release of the Game Boy Color, Nintendo revealed that the original Game Boy had sold in excess of 64 million units worldwide.

For graphics artist Elliot Curtis, the key reason why the Game Boy was such a sales success in the face of 'superior' competition was down to its gaming library. "It was Nintendo so it had the best games," he says. "Obviously *Tetris* shifted the units in the first place, but then you could also play *Mario*. Nintendo created games that worked well on a small screen with no colour. Everybody else seemed to be making versions of existing games that were inevitably inferior to the 'proper' version."



» Look away now Nintendo! The Prince attempts to pass a deadly slicer.

Programmer Ken Murfitt agrees: "Something that Nintendo understood well was that consumers enjoy straightforward products that are accessible, robust and low cost, but if I had to sum up the success of the Game Boy in one word it would be 'Tetris'."

Having experienced the Game Boy before most, Jaz Rignall is ideally placed to comment on how it held up over time. Despite the arrival of flashier portables, his appreciation of the Game Boy did not diminish. "If anything, the more I played the competition the better Nintendo's little grey brick looked," he says. "Anything with a colour screen ate batteries as fast as you could shovel them in. The Game Boy was relatively frugal, making it much friendlier on the pocket, energy-wise. It was also nicely designed. These days it looks hefty, but you could hold it and play it for hours comfortably. It was also built like a tank. The Lynx and Game Gear were fragile by comparison. I never had any qualms about bunging it into a bag and taking it anywhere. I loved the PC Engine GT but it was expensive, and some of its games were unplayable because they'd been designed for a big screen. It was also one of the all-time greats for consuming batteries. Ultimately it's about the games and not the tech, and the Game Boy proved that. It had a range of really fun carts – and *Tetris* was a killer app."

Jaz also notes the importance of handhelds to Nintendo's business over the years – from the Game Boy through to the Game Boy Advance, DS and now 3DS. "Just one look at Nintendo's numbers show how much revenue handhelds have brought in. The importance of those numbers has varied from generation to generation, but when Nintendo's flagship console hasn't done so well, handheld success has been critical. The 3DS is a good example of that. Remove its figures from Nintendo's financials from last year and things would be looking pretty dismal."

So what now for Game Boy? When the DS was introduced in 2004, Nintendo made it clear that the Game Boy name was not being retired. Given the firm's current difficulties with the Wii U, there's a possibility we may see a new Game Boy at some point. Imagine a stripped-down handheld designed specifically for playing retro games – essentially a portable Virtual Console with access to not just Game Boy games, but titles from those rival handhelds that once tried to outmuscle the small but mighty Game Boy. That would be a nice surprise. ✱

Special thanks to Warez, Bournemouth (retrowarez.co.uk) for its help with this feature



NINTENDO'S HANDHELD HERITAGE

An essential timeline to gaming on the go – Nintendo style

GAME & WATCH: 1980 ONWARDS

1989



GAME BOY

1996 – GAME BOY POCKET

1998 – GAME BOY LIGHT

1998 – GAME BOY COLOR

> "The more I played the competition the better Nintendo's little grey brick looked"
>
> Games journalist Jaz Rignall

GAME BOY ADVANCE

2001 – GAME BOY ADVANCE

2003 – GAME BOY ADVANCE SP

2005 – GAME BOY MICRO

NINTENDO DS

2004 – NINTENDO DS

2006 – NINTENDO DS LITE

2008 – NINTENDO DSi

2009 – NINTENDO DSi XL

2011 – NINTENDO 3DS

2012 – NINTENDO 3DS XL

2013 – NINTENDO 2DS

retro GAMER Subscription Voucher

☑ **YES! I would like to subscribe to Retro Gamer**

YOUR DETAILS

Title________ First name________

Surname________

Address________

Postcode________ Country________

Telephone number________

Mobile number________

Email address________

(Please complete your email address to receive news and special offers from us)

DIRECT DEBIT PAYMENT

☐ **I will only pay £15 for 6 issues (saving 50%*)**

Instruction to your Bank or Building Society to pay by Direct Debit

Please fill in the form and send it to: Imagine Publishing Limited, 800 Guillat Avenue, Kent Science Park, Sittingbourne, ME9 8GU

Name and full postal address of your Bank or Building Society

To: The Manager Bank/Building Society

Address

Postcode

Name(s) of account holder(s)

Branch sort code

Bank/Building Society account number

Originator's Identification Number

5	0	1	8	8	4

Reference Number

Instructions to your Bank or Building Society
Please pay Imagine Publishing Limited Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit guarantee. I understand that this instruction may remain with Imagine Publishing Limited and, if so, details will be passed on electronically to my Bank/Building Society

Signature(s)

Date

Banks and Building Societies may not accept Direct Debit instructions for some types of account

A6 instruction form

PAYMENT DETAILS

YOUR EXCLUSIVE READER PRICE 1 YEAR (13 ISSUES)

☐ **UK £51.90 (Save 20%)** ☐ **Europe £70.00** ☐ **World £80.00**

Cheque

☐ I enclose a cheque for £________

(made payable to Imagine Publishing Ltd)

Credit/Debit Card

☐ Visa ☐ Mastercard ☐ Amex ☐ Maestro

Card number Expiry date

Issue number ☐☐ (if Maestro)

Signed________

Date________

Code: PAL142Q

Please tick if you do not wish to receive any promotional material from Imagine Publishing Ltd by post ☐ by telephone ☐ via email ☐

Please tick if you do not wish to receive any promotional material from other companies by post ☐ by telephone ☐ Please tick if you DO wish to receive such information via email ☐

*Terms & conditions: Pricing will revert to our standard offer of £22.50 every 6 issues on the third payment made. Subscribers can cancel this subscription at any time. New subscriptions will start from the next available issue. Offer code PAL142Q must be quoted to receive this special subscription price. Details of the direct debit guarantee are available on request. Offer expires 30th September 2014. Imagine Publishing reserves the right to limit this type of offer to one per household.

Return this order form to: Retro Gamer Subscriptions Department, 800 Guillat Avenue, Kent Science Park, Sittingbourne ME9 8GU or email it to retrogamer@servicehelpline.co.uk

You can manage your subscription account online at www.imaginesubs.co.uk



EXCLUSIVE SUBSCRIBER BENEFITS

Start a Direct Debit today and for just £15 get the next six issues – saving over £30 a year

- Save 50% on the cover price
- Free UK delivery and money-back guarantee on any unmailed issues
- Be the first to receive the latest **Retro Gamer** articles

Nick Thorpe's

THE RISE AND FALL OF CHEATS



Gamers have been seeking an unfair advantage for years, whether by code, POKE or shady cheating device. Join Nick Thorpe for a look at the history of gaming's dark arts…

There's no point in hiding it, reader. We know what you've been up to. Don't worry though, it's not just you – it's your cousin, your friends, even the person next to you in the queue at the newsagent. You've all been cheating, and so have we. To know a gamer is to know a cheater.

For how long have we been doing this? It's a little hard to tell. The history of the gaming secret is nice and clear, with Warren Robinett's *Adventure* known to be the first game to feature an 'Easter Egg' discovered by players, but with out-and-out cheats it's a little harder to track. *Castle Wolfenstein*, a 1981 game for Apple II computers, appears to have been the first target of a commercial trainer, called The Great Escape Utility. The software wasn't marketed by the game's publisher Muse Software, but instead a company called Moxie. Adverts promised that the software would not only fix the bugs in *Castle Wolfenstein* but allow players to choose their starting location and gain unlimited items. Bundled with a map and a strategy guide, it was a comprehensive package for players who wanted to win at *Wolfenstein*.

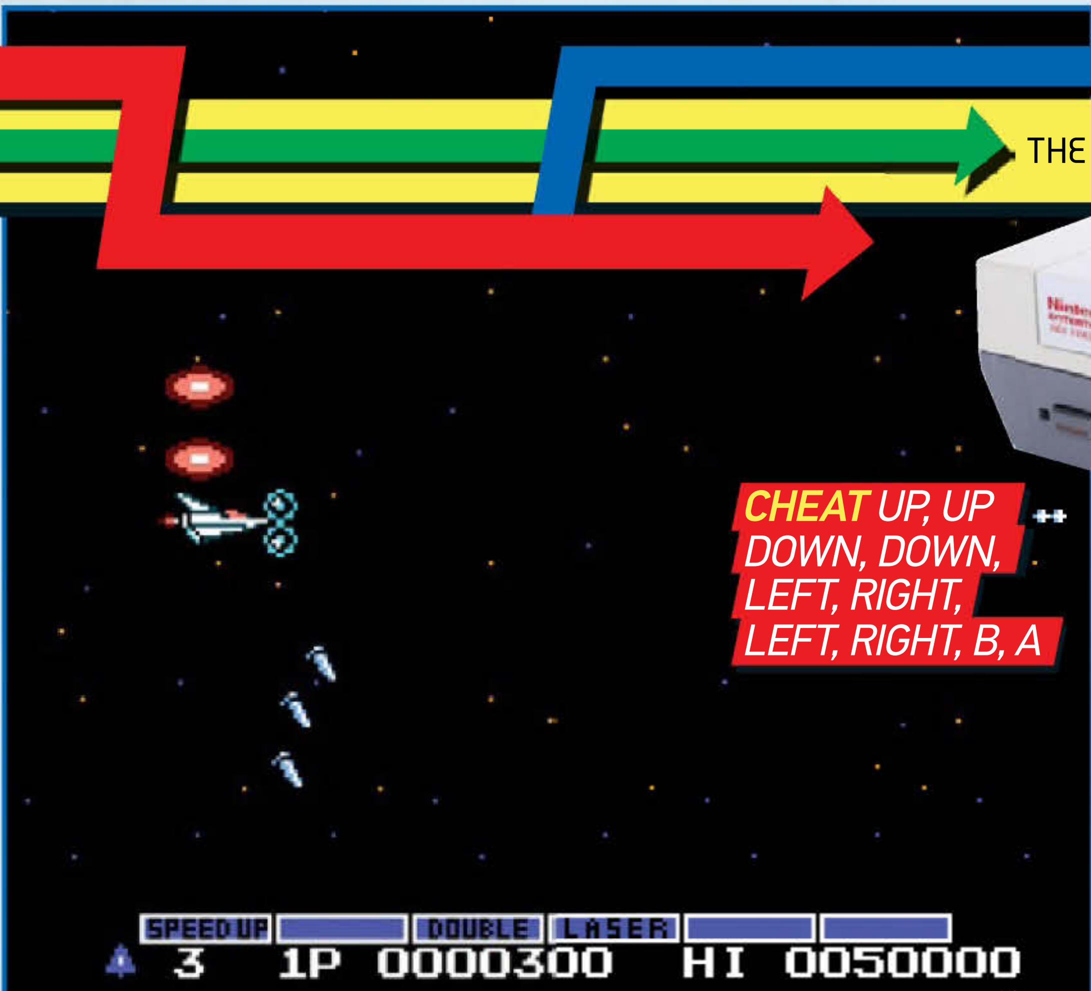
It seems strange in hindsight, but cheating was slow to get off the ground. In the early days, any cheat codes were primarily for the benefit of the developers rather than players. *Manic Miner* is an early example – by typing 6031769 (a number based on Matthew Smith's driving licence, fact fans) on the title screen, players enabled a level select cheat which could instantly take players to any screen in the game with the correct key combination. It proved to be a beneficial ability for the developer that was also useful to players, and the level select remains one of gaming's classic cheats. This kind of code was the exception rather than the norm in the early Eighties, though. When *Crash* began to include a dedicated tips section – which wasn't a feature until issue five – the pages were largely filled with long-form advice from other players.

Thankfully for technically inclined cheaters, it soon became clear that the openness of the 8-bit computers was a boon, because cheating was simply a matter of knowing where to POKE.

"The mini-program that was printed in the magazine was quite simple really," remembers Nick Roberts, who was responsible for the tips section of the classic Spectrum magazine *Crash*. "It set up a loading routine that would load the game from cassette as usual, but then immediately change the data in memory using POKE commands to add the cheats." While POKEs could be used for all kinds of purposes – fixing the attic bug in *Jet Set Willy* being a notable one – they were most often exploited by cheaters. Of course, playing around with such variables



» [Spectrum] The boot displayed in the status bar is the indicator that *Manic Miner*'s level select is active.



» [NES] Kazuhisa Hashimoto's 'Konami Code' grants an instant arsenal in its debut game, *Gradius*.



CHEAT UP, UP, DOWN, DOWN, LEFT, RIGHT, LEFT, RIGHT, B, A

> "One wrong number would cause the POKEs to not work and the game to crash!"
> Nick Roberts



» [Commodore 64] Using shift and G in Kung-Fu Master allows you to bring your gun to the fist-fight.

required a degree of caution, as Nick explains: "I had to be very careful to get the text right, as one wrong number would cause the POKEs to not work and the game to crash!"

The vast majority of POKEs were sent to *Crash* by readers, who had to work hard for their ill-gotten gains. "We received a sackful of mail everyday from the local postie and had to sift through this to find the *Crash* Playing Tips letters," Nick tells us. "There was a hardcore clever bunch of gamers – the Howdon Hackers and Jon North stick in my mind – who used to thrive on hacking the games, finding the data that stored the number of lives, energy, tomatoes or whatever and adjusting these amounts to give the desired result." Programmers revealing their own cheats were rather less common, but did happen – "usually if sales were flagging and they wanted to squeeze some more purchases out in Woolworths!"

But if the community didn't turn its attention to your favourite games, you weren't totally out of luck. Romantic Robot's Multiface cartridge included a variety of functions, but one of the most useful was its ability to freeze the game, allowing users to look at the state of RAM with PEEK commands. "You could search for the data address that had the number of lives in it, mark down the address, then play the game some more and lose a life," explains Nick. "Then you would check the address again to see if the number of lives had changed, if they had you knew you had found the lives counter. From here you could give yourself 999 lives easily by changing the number to 999!"

The power of POKE commands was vast, allowing pretty much every game to be broken, but there was a price to be paid for this ability. "POKEs did get more and more complex though as the 8-bit years went on," Nick says. Eventually, the complexity of the POKEs produced exceeded the magazine's capacity to hold them: "In the end printing listings in *Crash* was impossible as they would have run to many pages. When we started covermounting a demo cassette we included the POKE listings on the cassette instead so the newer and more complex 128K games could have cheat programs."

While owners of the other 8-bit computers could also enjoy POKEs and had Multiface equivalents like the Commodore 64's Action Replay, console owners had no such luck and had to hope that developers were feeling generous enough to implement codes. They often did, and one particular code gained enormous notoriety during this period – the Konami code, which originated from Kazuhisa Hashimoto's work on the NES version of *Gradius*. Finding the game too hard to beat unaided, ▶

UNDERHANDED UNDERTAKINGS



If you're not cheating, you're not trying – here are the methods which will grant you an unfair advantage

CHEAT CODE
■ A cheat deliberately implemented in a game, often activated with a sequence of button presses or a password.

TRAINER
■ Specialised memory editing software that allows players to cheat, often created for a single specific game.

SAVE EDITING
■ Modification of the data in a saved game file. Unlike memory editing, this happens while the game is not being played.

EXPLOIT
■ A method of cheating which takes advantage of programming flaws to create unintended effects.

CHEATING DEVICE
■ Memory editing hardware, which performs the same functions as a trainer but across every game on a platform.

STRATEGY GUIDE
■ Written tips from a player that has beaten the game, with usefulness depending on the game's genre.



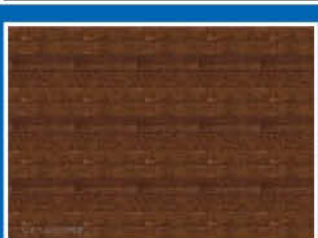
CHEATERS NEVER PROSPER

While lots of games feature cheats, these five titles show that some developers just don't like cheaters...



GRADIUS III SNES

■ The Konami code is one of gaming's most famous cheats, but entering it in *Gradius III* will instantly destroy your ship. However, if you replace left and right with L and R, the code will once again work in your favour, providing a full complement of weaponry.





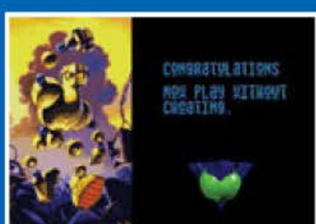
DOOM 32X

■ *Doom*'s level select cheat is bizarrely included as a standard part of the main menu. It might be enticing, but don't dare touch it if you want to finish the game – if you do, you'll see a credits roll at the end of level 15 followed by a mock DOS prompt.

HERETIC PC

■ Everyone loved *Doom*'s cheats, right? IDDQD was your passport to invincibility and IDKFA would turn you into a walking armoury. But trying that with *Heretic* was a bad idea – the codes had rather less desirable effects, with the former killing you and the latter removing your weapons.



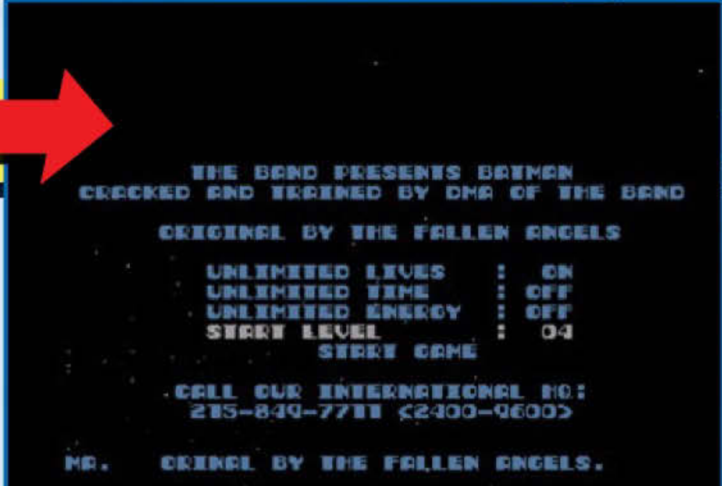


METAL GEAR SOLID PLAYSTATION

■ *Metal Gear Solid*'s torture sequence involves quickly hitting the Circle button. No problem for players with autofire pads, right? Wrong. Revolver Ocelot warns you not to use one or he'll know, and he isn't kidding – if the game catches you out, it's game over.

VECTORMAN MEGA DRIVE

■ *Vectorman* dishes out one of the mildest punishments on show here, allowing you to play through the entire game with cheats active, only to admonish you for cheating instead of displaying the credits. It's a simple punishment, but one which is commonly used to discourage any shenanigans.



» [Amiga] This trainer for *Batman: The Movie* is typical of the work done by pirate groups in the 16-bit era.

he implemented a code to grant a full complement of power-ups, which was left in the game and discovered by players. The code would go on to be reused in a variety of Konami games with varying effects. Perhaps the most notorious of these is *Contra*, a famously difficult game in which the code would grant 30 much-needed lives. Such is the popularity of the code that it has gone on to become something of a universal cheat – apart from appearing in many non-Konami games, it can also often trigger Easter Eggs on websites.

At the beginning of the Nineties, this situation began to shift with the advent of console cheat devices – but not everybody was happy about this. In 1990, Galoob released the Game Genie, a device invented by Codemasters for the NES. Fitting between the cartridge and the cartridge slot, the Game Genie allowed players to enter codes that modified values in RAM to provide beneficial effects. At a time when Nintendo still imposed incredibly severe restrictions on its third-party developers to keep control of its platform, the Japanese giant always came down hard on unlicensed NES products. The idea of an unlicensed device that allowed players to modify Nintendo's software was something else though – it wasn't just a nuisance, it was an abhorrent development that the platform holder was determined to stop.

By May 1990, both Galoob and Nintendo had unleashed the lawyers – Galoob first filing for a protective judgement, with Nintendo counter-filing for breach of copyright. A preliminary injunction was issued in Nintendo's favour by July of that year, and the Game Genie was removed from sale. Nintendo's lawyers presented two key arguments against the Game Genie. Firstly, it was claimed that the use of a Game Genie created a derivative work, an act prohibited under copyright law. Secondly, the cheating enabled by the Game Genie would harm the 'Nintendo Culture' by diminishing the value of impressive gaming achievements.

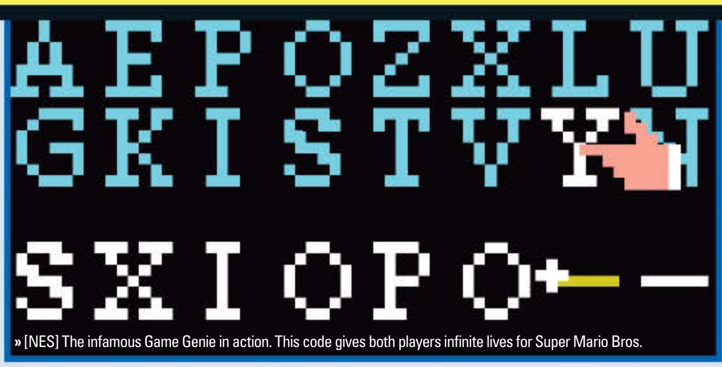
But both of Nintendo's arguments fell flat in court. It was determined that as the Game Genie couldn't function without the official software and hardware, it represented no threat to Nintendo's sales. Meanwhile, the argument on 'Nintendo Culture' fell flat due to Nintendo's own actions, primarily the publication of cheat codes in *Nintendo Power* and the autofire capability of the NES Advantage joystick. In July 1991, after over a



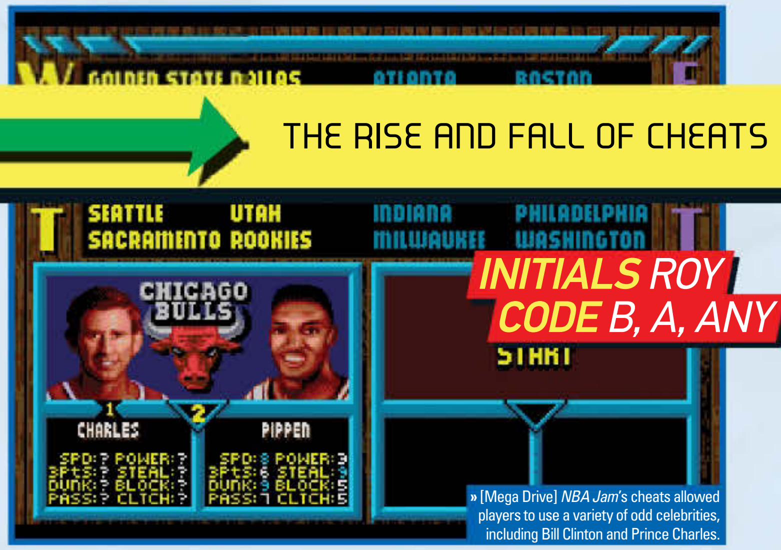
» [Mega Drive] Programmers often include cheats for their own benefit, but rather fewer include their own faces.



» [Arcade] *Mortal Kombat 3* had a dedicated pre-game Kombat Kode system – this one allows you to fight Smoke.



» [NES] The infamous Game Genie in action. This code gives both players infinite lives for Super Mario Bros.



» [Mega Drive] *NBA Jam*'s cheats allowed players to use a variety of odd celebrities, including Bill Clinton and Prince Charles.

year of wrangling, the court decided in favour of Galoob. The toy company was free to sell the Game Genie once more and was awarded a whopping $15 million in damages, based on an estimation of 1.6 million lost sales. Nintendo appealed but finally lost in May 1992. The Game Genie range would go on to sell 5 million units, paving the way for the widespread success of cheat devices.

Less legally sound was the frequent use of trainers. The trainers themselves weren't a problem, but their distribution was as they quickly became associated with piracy. Cracking groups would frequently add showy intro sequences to their releases in order to take credit for removing protection, and trainers were often implemented as part of the intros to add value to the releases. The practice became common in the Eighties on computers such as the Amiga and Atari ST and eventually crossed over onto the consoles, lasting so long as to reach the likes of the Dreamcast and PlayStation 2.

While cheating was often tied up with the economics of gaming, it was always driven by community. Whether you were being told a level select code by one of the bigger kids or including handwritten cheat books with games you lent to friends, word of mouth was crucial to spreading the knowledge. Of course, in such an environment misinformation thrived – while the rumours of a hidden character called Sheng Long in *Street Fighter II* originated from a US magazine, it was never hard to find someone who swore blind that they'd found the method to play as Goro in *Mortal Kombat* or seen Lara Croft naked. These fake cheats were a compelling mix of urban legend and practical joke – always false and usually purported to be achieved by ludicrously complicated means, but enticing enough that you'd give them a go.

By the mid-Nineties, cheating had reached a peak. Knowing the appeal that cheats had for players, developers began to implement all kinds of weird and wonderful effects in their games. *NBA Jam* implemented bizarre hidden characters including a range of celebrities and the development team, while *Mortal Kombat 3* openly flaunted its multitude of cheats with the inclusion of Kombat Kodes on the versus screen, which allowed for the player to fight secret characters and even play a hidden game. All kinds of weird and wonderful effects were ▶

> **"There was a hardcore clever bunch of gamers who used to thrive on hacking the games"**
> Nick Roberts



SEX AND VIOLENCE

When cheating inspires moral panic



On a couple of occasions there have been cheats which opened up taboo content and caused concern amongst the devout followers of Mary Whitehouse. *Mortal Kombat* had bloody violence as a standard feature in the arcades, but when it came home the ketchup needed to be activated with a code. Every version had this feature, with the exception of the versions on Nintendo's consoles due to content guidelines. *Mortal Kombat* became one of the key games leading to the 1993 US Senate hearings on videogame violence, which led to the creation of the ESRB. While Nintendo had proudly trumpeted its less violent *Mortal Kombat*, the lure of the dollar was too much and *Mortal Kombat II* was released with blood on all formats.

Over a decade later, *Grand Theft Auto: San Andreas* would inspire a new moral panic. The controversy began with the release of the 'Hot Coffee' mod, which added a crude sex mini-game to the PC version of the game. Rockstar claimed that it was the work of "a determined group of hackers who have gone to significant trouble to alter scenes in the official version of the game." The statement was quickly proven false, as console owners were able to unlock the content with cheating devices – the content was Rockstar's own work, and there would be hell to pay as a result. The game's rating was revised from Mature to Adults Only by the ESRB, prompting many retailers to remove the game from their shelves. A costly recall began and a new revision was released minus the offending content, but the damage was done – the class action lawsuit the followed the scandal cost publisher Take-Two over $20 million.





A SHORT HISTORY OF PLAYING TIPS

We take a fond look back at one of Crash's most popular sections



"The origination of Playing Tips probably belongs to the realm of physical role-playing games, but in the context of the 8-bit home computer market in began in *Crash* because each game reviewed contained the keyboard controls," begins Roger Kean when we ask him about the origins of *Crash*'s popular Playing Tips section.

Despite the popularity of the section, which was initially overseen by Robin Candy, publishers and developers weren't too keen on it, concerned that *Crash* was leading youngsters to the rocky road of home taping. "Several software houses complained that we were giving way too much, that we were making it easy for kids to pirate the tapes and hand on the keyboard controls," continues Roger. "From this particular 'cheat' it was a natural evolution to begin publishing real cheats: shortcuts, POKEs that would reveal otherwise hidden objects."

The section's popularity soared and Roger saw it as a critical section of the magazine. "In many cases, as games became more dense, layered and tough to complete, Playing Tips became an ever more important facet of *Crash*," he continues. "In the same way the Forum welded the magazine to a lifestyle, so too did the Playing Tips, with eager readers all wanting to be first with the latest cool hints and cheats." The section stayed until issue 64, eventually being rebranded as Nicko's Tips.

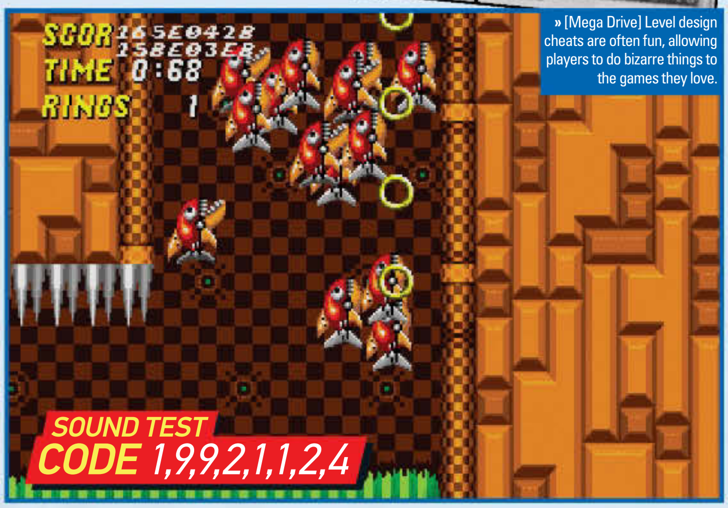


» [From Left] Robin Candy, Nick Roberts and Hannah Smith all looked after *Crash*'s popular tip's section. Oh and some guy called Lloyd Mangram too…

▶ being included – big head modes in fighting games, drift challenge modes in racing games, and even level modification modes, allowing players to change the designs of the stages they were playing.

Cheating was big business, too. Devices had experienced a boom since the days of the Game Genie, and if you weren't getting booklets of codes mounted on the cover of your favourite magazine, you could always pick up dedicated tips and cheats magazines like *PowerStation* or *Ultimate Player*. Gaming TV shows anchored their cheat sections with strong personalities like the Games Master, memorably played by the late Patrick Moore, and *Bad Influence*'s Nam Rood. If you were really stuck, you might even resort to a premium rate cheats hotline like the PlayStation's Powerline. However, a variety of factors would begin to erode not only the ease of cheating but the importance of doing so.

While saving games had long been possible on computer platforms, console games didn't receive widespread support for saves until the 32-bit generation arrived – but the impact was swift, as games became longer and saving your progress went became a virtual requirement. The upshot of all this for cheaters was that games began to include unlockable rewards, often including features that would previously have been cheat



» [Mega Drive] Level design cheats are often fun, allowing players to do bizarre things to the games they love.

CHEAT MACHINES



ACTION REPLAY
AMIGA

■ Pirate Amiga games always have cheats in. This is the legal alternative for honest cheaters.



ACTION REPLAY
COMMODORE 64

■ The Action Replay was released on pretty much every major system. Here's the Commodore 64 version. Why isn't it beige though?



GAME GENIE
NES

■ This made Nintendo so angry it took Codemasters to court. Codemasters went on to win though.



GAME GENIE
SNES

■ All of a sudden games like *Super Mario World* and *Super Ghouls 'N' Ghosts* became a lot easier to play.



» [Mega Drive] Using cheat devices can lead players to prototype content, such as *Sonic 2*'s deleted Hidden Palace Zone.

codes. For example, there's no button code for infinite ammunition in *Metal Gear Solid* – if you want that, you'll need to beat the game with the good ending. Developers wanted you to play honestly on your first run before letting you have some fun with cheats, and hoped to increase the replay value of their games in the process. It was hard to get around this, too. While save editing was possible for these systems, it was usually impractical thanks to the proprietary memory devices used by each console.

Meanwhile, online gaming was taking off on PC and cheating was becoming an issue of etiquette – using cheats at home in a single-player game is fine, but people often take exception when your cheating actively affects their gameplay experience. Cheating in online games dates back to at least the Nineties, with PC releases such as *Quake* falling prey to cheaters early on. Developers would often patch exploits, but dedicated anti-cheating measures for multiple games didn't start to appear until the turn of the millennium. PunkBuster, an anti-cheating program that scans memory to identify cheaters, was announced in 2000. Initially targeting *Half-Life*, the software was first included in *Return To Castle Wolfenstein* and continues to be used today in the *Battlefield* and *Assassin's Creed* series. Similar programs that arrived in the same time frame include the likes of HackShield, Valve Anti-Cheat and Warden. ▶

> "As games became more dense, Playing Tips became an ever more important facet of Crash"
> Roger Kean

GAMES WITHIN GAMES



Developers have often shown their retro love by hiding classics in new games. Here are five of the best…

LOTUS II: RECS
MEGA DRIVE



■ A neat conversion of Shaun Southern's C64 game *POD* lurks within *Lotus II*. To access it, enter POD PLEASE as Player One's name at the main menu.

PITFALL: THE MAYAN ADVENTURE
VARIOUS



■ The original Atari 2600 version of *Pitfall!* could be found hiding in all seven versions of *Pitfall: The Mayan Adventure*, with the cheat code depending on your format of choice.

ARNOLD PALMER'S TOURNAMENT GOLF
MEGA DRIVE



■ If you're feeling patient, take 100 shots on your first hole and enter a code on the game over screen to enjoy a single-screen version of *Fantasy Zone*.

CONTRA: LEGACY OF WAR
PLAYSTATION/SATURN



■ Appaloosa included a version of *Gyruss* in the first of the 32-bit *Contra* games. Both versions include a code to play it, but it's also hidden in the main game.

MORTAL KOMBAT 3
VARIOUS



■ Hiding within most versions of *Mortal Kombat 3* is a rather difficult tribute to *Galaga*. Access it from cheat menus on consoles or with a Kombat Kode in the arcade.



GAME GENIE
SEGA GENESIS
■ Sega proved rather friendlier than its rival, allowing the Game Genie to release as a licensed product.



GAME SHARK
PLAYSTATION
■ Gamers of 32-bit consoles were still in need of useful cheats and a cheat device with 4,000 preloaded codes made Game Shark very desirable.



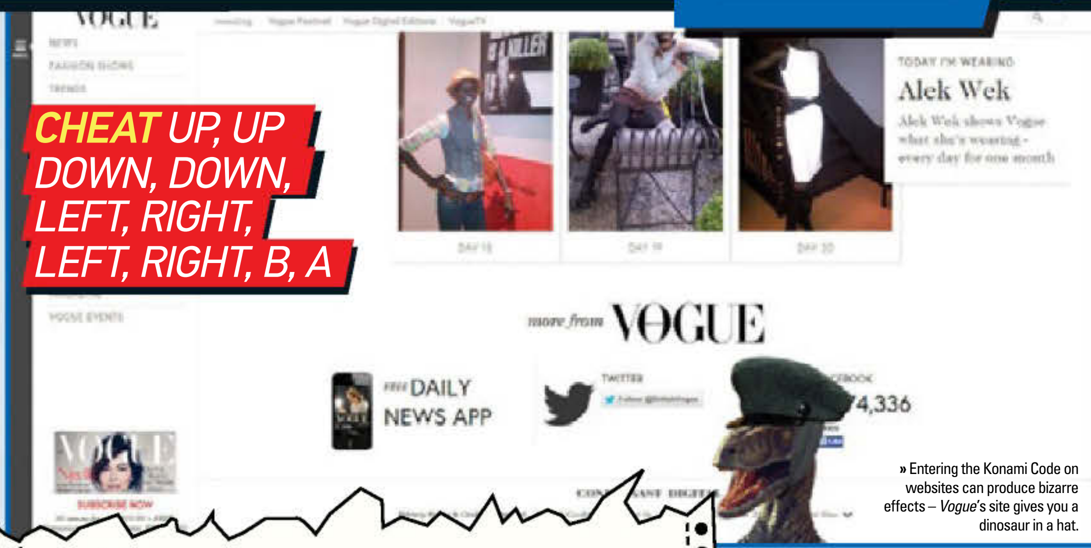
GAME SHARK
SEGA SATURN
■ The Game Shark was first released in 1995 and was available for the Saturn and PlayStation. The PlayStation version had a cool 'Explorer Mode'.

Game Genie and Game Shark © Evan-Amos

But while PC games could be patched to prevent such shenanigans, console gamers had a much rougher introduction to the online world. The Dreamcast's groundbreaking RPG *Phantasy Star Online* was blighted by users of cheat devices. Sega had no way to patch the game, as the Dreamcast lacked a method of storing updates, so the cheaters ran riot. Player kills became a frequent feature of a game with no player versus player combat, griefers would deliberately freeze games and, bizarrely, characters were frequently replaced with a low-level NPC called Nol. The problems were sufficiently severe that Sega released a second version of the game just six months after the first, featuring bug fixes, anti-cheating measures and a PvP battle mode. Thankfully, the release of the Xbox in 2001 set a precedent for the inclusion of mass data storage in consoles, ensuring that games could be patched like on PC.

Even with the ability to issue patches, cheating has proven to be one of the biggest difficulties for developers of online games. Developers have now changed their responses to cheating – rather than patching the game to prevent cheating, they're now working to identify cheaters and quarantine them with their own kind – creating an environment .

The internet has also hurt some traditional methods of distributing cheats. Dedicated tips magazines and hotlines have been killed off by competition from websites that offer the same content for free. While printed strategy guides still exist, there's a wealth of community-created content available for free that fulfils the same purpose. The launch of YouTube has proven particularly important in this regard, with users creating video walkthroughs for many games within days of their release. While it might be a decline for those hoping to make a living from cheats, it can be argued that it's no different to the word of mouth spread of cheats – it's just much more technologically advanced and broadened to a global scale.



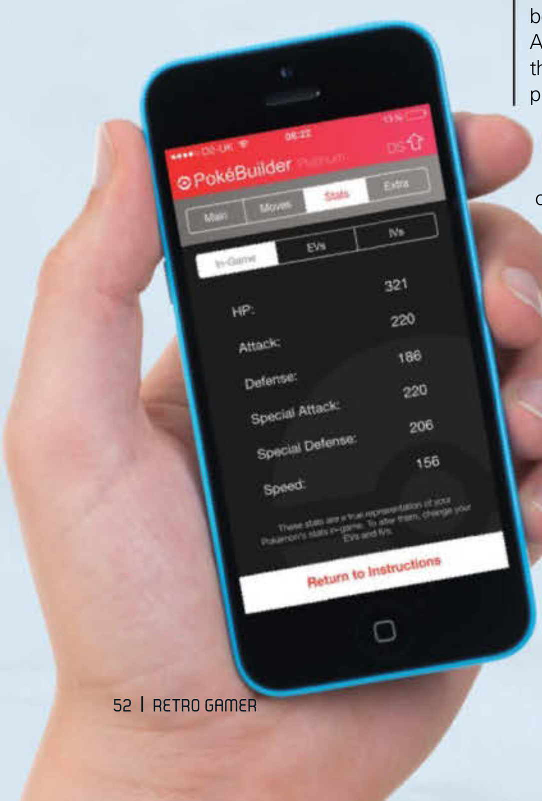
» Entering the Konami Code on websites can produce bizarre effects – *Vogue*'s site gives you a dinosaur in a hat.

> **"Several software houses complained that we were giving away too much"**
> Roger Kean

While cheats had steadily declined as a result of these issues, the most damaging trend for cheating in recent times has been the rise of microtransactions. As publishers have figured out that they can sell things that were previously offered as cheats, they have increasingly chosen to do so. The result is that the most important cheat code today is the long number on the front of your credit card – if you want to level up your characters in *Tales Of Vesperia* or get additional in-game cash in *Gran Turismo 6*, you'll need to pay real money. It's a business model that has been adopted heavily by mobile games, where it is typical to offer the game for free and make money back on such purchases, but when applied to full-price console games it seems like a rather cynical cash grab. However, money talks and there are players that will pay their way through games, so microtransactions are here to stay.

But while cheats listings might be looking a bit slim these days, often filled with glitch exploits rather than satisfying button codes, some developers are still flying the flag for cheaters. Rockstar's *Grand Theft Auto* series has always contained a healthy list of old-style cheat codes, giving standard effects like maximum health as well as the more unconventional ones such as moon gravity, and maintains this tradition. On a similar note of traditionalism, the 2011 reboot of *Mortal Kombat* included Kombat Kodes, a nod to long-term fans of the series. There are other motivations to allow players to cheat, too – Square Enix saw fit to promote the inclusion of a new 'Character Booster' cheat mode in its 2012 PC re-release of *Final Fantasy VII*, as a means of letting players enjoy the story rather than getting bogged down in battles.

Of course, players are still at it too, with even modern gaming phenomena like *Minecraft* having old-school trainers available for those willing to use them. Even smartphones are being co-opted by enterprising cheaters, thanks to apps like Pokébuilder. The app allows players to create Pokémon to their own specification and transfer them to the game via the wireless connection on Nintendo's DS range, supplanting traditional cheating devices and earning a pretty penny for the developers. These examples just go to show that while cheating might not be the huge part of gaming that it once was, it's unlikely to ever die out – players will always want to cheat and someone will always find a way to let them. *





» [PlayStation] Big head mode is a popular cosmetic cheat, deforming characters to add a touch of humour to proceedings.



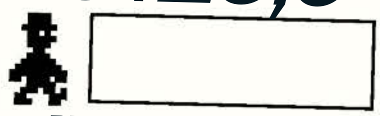
THE CLASSICS

The best, most memorable and strangest cheats of all time

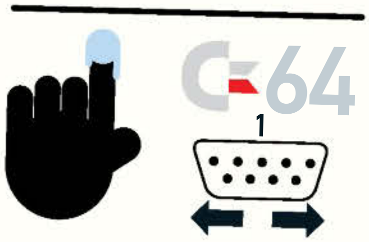


KONAMI CODE: Gradius (full weaponry), Contra (30 lives), etc

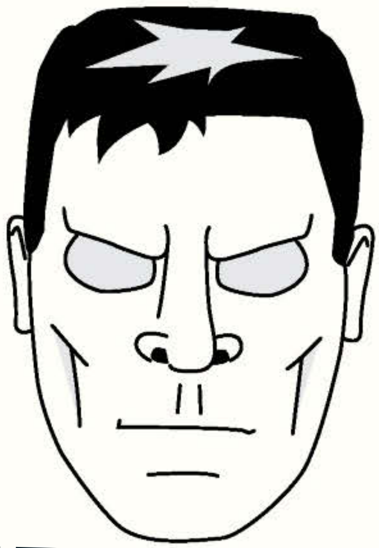
POKE 35123,0



REMOVES ENEMIES: Jet Set Willy



INFINITE LIVES: Creatures 2



IDDQD

GOD MODE: Doom

CALENDAR HACK:

SKIP BOSS (THE END): Metal Gear Solid 3



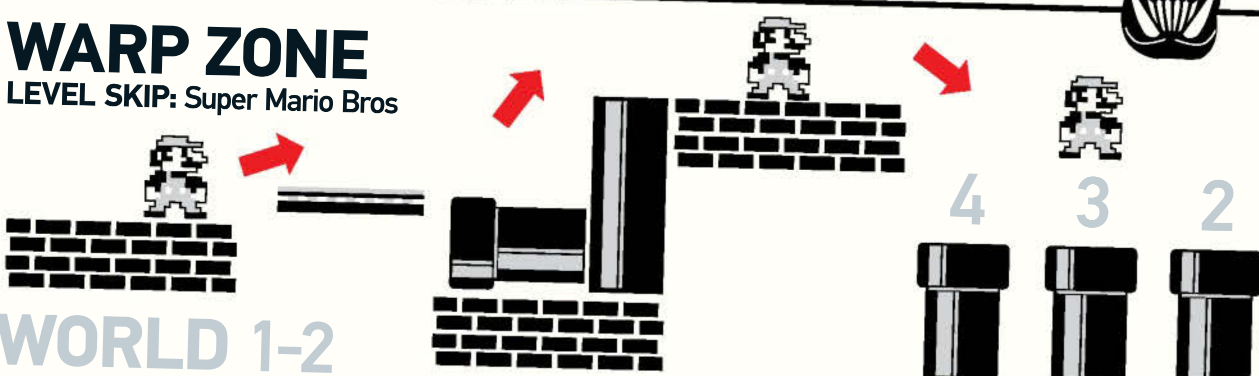
IS IT TRUE THAT THE ALIENS SUPPORT MAN UTD

WEAKER ALIENS: Alien Breed



WARP ZONE

LEVEL SKIP: Super Mario Bros



鉄拳 TEKKEN

One of the trailblazing 3D fighters of its time, the Tekken series continues to pack a punch to this day. Luke Albigés goes head-to-head with series producer and director Katsuhiro Harada to learn about the origins of the King Of Iron Fist Tournament

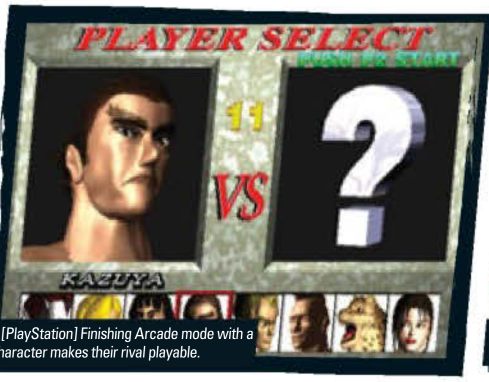
If there's one thing we've learned over the years, it's that there's no tangible benefit to being first to the party in the technology market. But Sega, more than any other company, seems to have suffered from failing to recognise this trend.

Saturn beat PlayStation to the punch, but Sony still dominated the generation through clever marketing and better third-party support. Dreamcast versus PS2 was a similar story, with many skipping Sega's dinky white classic to wait for the follow-up to a proven success. And even when it came to ushering the one-on-one fighting genre into the third dimension, Sega was once again first on the scene with *Virtua Fighter*. But with a novel gimmick in its 'one button per limb' configuration and the good fortune to back the more popular console, Namco's *Tekken* series would come to be the very definition of what a 3D fighting game should be.

With the industry shifting rapidly from 2D to 3D at the time, it's no real surprise that excitement was so high around games like *VF* and *Tekken* – that extra dimension offered fighters unprecedented tactical options while showing off the latest tech beautifully, although we were surprised to hear that *Tekken* was originally designed around the latter rather than the former. "*Tekken* was a project to develop technology for use in 3D character animation, rather than as a 3D fighting game," reveals series overlord Katsuhiro Harada, the veteran producer and director who has been on the series since it began. "We reworked the game drastically around *Tekken 3* to make it more of a proper 3D fighting game."

Through some combination of innate skill, blind luck, experience and novelty value, though, everything came together to make *Tekken* seem like one of those glimpses of the future – a moment where you see past a game's problems and appreciate it for what it means for the next era of gaming. Or, in this case, just a supremely enjoyable early 3D fighter at a time when nobody else had really stepped in to show the world how the genre was supposed to be done. ▶


» [PlayStation] The view select option was only really there to show off the 3D visuals.



» [PlayStation] Finishing Arcade mode with a character makes their rival playable.



» [PlayStation] King only came into his own when Namco gave him his chain throws.



鉄拳



» [PlayStation] A perfect run on the *Galaga* loading game unlocks a secret character.



» [PlayStation] Jack will always get battered by faster characters. So, everyone else.

Going back to it today, the original *Tekken* (and indeed to a lesser degree the second one too) does feel rough around the edges, but with so many less capable teams putting out horrible 3D beat-'em-ups to try and cash in on the new craze, *Tekken* would only have felt even more accomplished by comparison. "Rather than being well received as a fighting game, I was well aware that games of that era were more highly regarded for the 3D polygon and other graphics technology," Harada tells us, pinning a lot of the game's early popularity on it being the right kind of graphical showcase in the right place at the right time.

Namco was locked into that right place from an early stage, its arcade division developing boards based on PlayStation technology before the platform had even been released to prove itself. "There wasn't another option to consider," Harada confirms. "Most people knew that platform as PlayStation, but we developed the PlayStation hardware-compatible arcade board, System 11, along with SCE before the release of the PlayStation." A risk, then, but a calculated one and with PlayStation the strongest of the then-forthcoming consoles in terms of 3D tech – the route Namco was exploring with games like *Ridge Racer* and *Tekken* – the team simply latched onto the most obvious partner. Which, as the history books will tell you, worked out pretty well. Whereas even established greats like *Street Fighter* and *The King Of Fighters* would struggle to find their footing on PlayStation, Namco read the market brilliantly and as such had a fighter at the forefront of Sony's revolution to make gaming cool.

From an outsider's perspective, it seems to be an extremely competitive market, but Harada is quick to downplay this. "If asked whether there is a rivalry with other fighting games, maybe most won't understand this, but in the arcade game sector, we are rivals but also comrades," he reasons. "For companies that operate arcades, not only do you need your own games to be successful, but also those of rival companies as well. That's why they are more like brothers-in-arms rather than rivals. It shows lack of understanding when people try to say there is rivalry or bad blood there. Often, events for several games are held at the same time." Perhaps it's less a competitive scene and more a somewhat symbiotic one, then – each fighter needs others to succeed as well in order to maintain popularity and awareness for the genre as a whole. "Even if someone feels hostile towards a rival, that just shows their own shortcomings. That said, it is entertaining as a performance," he chuckles, as we recall his staged spats with *Street Fighter* boss Yoshinori Ono in the lead-up to the launch of *Street Fighter X Tekken* – for all the trash talk, cosplay, hashtags and other daft feigned rivalry there, the pair were always complimentary of one another's work when asked directly.

> **"We make at least as much, if not more, from our arcade releases of Tekken"**
> Katsuhiro Harada, Bandai Namco

As much as the market may have changed a lot in the last 20 years, Harada himself doesn't seem to think he has. "I've just gotten older, I think," he smiles. "My role hasn't changed that much. Perhaps going to the arcade to promote the game and for the events is something I don't do anymore. In regards to marketing and PR, conceptual design, game design and project management, these are some of the roles I have always had. I've been a bit bossy, even when I was young."

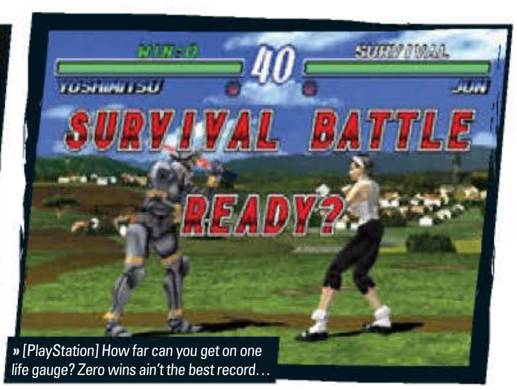
Given the enormous popularity of *Tekken* both in arcades and on PlayStation, a sequel was always on the cards. Indeed, *Tekken 2* was one of the most anticipated titles of the early PlayStation era, with the kind of magazine coverage and pre-release buzz that you seldom see for a franchise which is only one game old. With that in mind, it's odd to hear that Namco was still going at it from a very tech-minded point of view. "It was basically decided by focusing on what new technology we wanted to implement," recalls Harada when discussing the approach to creating the second game. But it wasn't all polygon counts and bullet points – gameplay still counted, as anyone who has played the improved sequel will recognise. But the PlayStation audience was still too young to be trusted, so Namco took gameplay advice from a more established, reliable source instead. "Regarding the game as a fighting game, we based our decisions on feedback from questionnaires in the arcade," states Harada.

"The arcade is a very severe market," he continues. "Consumers only pay you 100 Yen at a time to play. You don't get 50 dollars right away – you have to have them keep coming back. That means your game has to be extremely fun to survive. Fighting games raised in this environment are more entertaining and more balanced as a result." Even so, it's a tough market to crack from this angle today, with the cost of console development alone being prohibitive enough for many smaller teams before you even factor in anything like arcade boards. Plus, there's the small fact that the arcade scene isn't what it used to be, though Harada doesn't seem to see this as a worldwide problem.

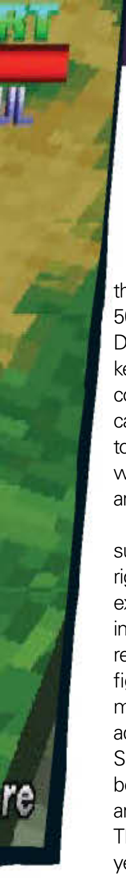
"Many people say arcades are dead," he muses. "Maybe in the West, that is somewhat true. But they are still around in the Eastern hemisphere, especially Asia. They are even increasing in South-east Asia. Console releases of *Tekken* sell millions of copies each so you might think it is quite lucrative, right? Maybe even more



» [PlayStation] Yoshimitsu's design and moveset change hugely with each game.



» [PlayStation] How far can you get on one life gauge? Zero wins ain't the best record…

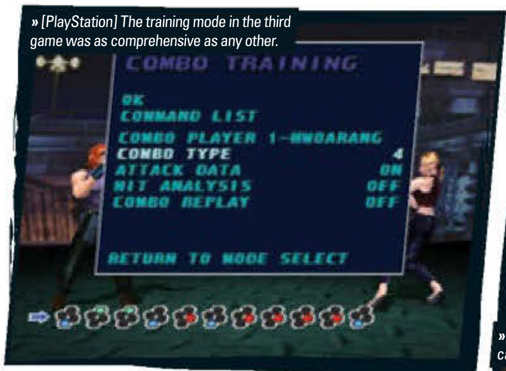


than the arcades? But, that is not true. You only receive 50 dollars for a console title, maybe up to 100 including DLC, and then you're done. But hit games in the arcade keep on performing. We make about as much as the console release when we sell the initial game and arcade cabinet, but then keep profiting as the game continues to perform in the arcade. Most people don't know that we make at least as much, if not much more from our arcade releases of *Tekken*. Are you surprised?"

Yes. Yes we are, actually, but we're even more surprised to hear that the money made here is poured right back into the franchise in the form of console extras. "The revenue gained from the arcade is then invested into the development of the console version," reveals Harada. "That is why compared to other fighting games, *Tekken* is able to have more bonus modes, customisation features, bonus BGM and additional characters at no added cost to the consumer. So many console consumers often never realise the benefit they are receiving from *Tekken* being in the arcade. That is basically why we develop in this cycle. That's probably also why *Tekken* has survived for 20 years now."

Even though *Street Fighter X Tekken* promotion is long since finished, Harada can't seem to help but take one last friendly pop at Ono in summarising his argument. "One of my favourite franchises, the *Street Fighter* series, didn't see a new instalment for ten years in between *Street Fighter III* [and] *Street Fighter IV*," he recalls. "However, we are also an arcade operator, so we were able to generate revenue to keep updating the *Tekken* franchise with new instalments. That's essentially why *Tekken* has generated the most income in the arcades in the past 20 years of any fighting games, and sold over 43 million console copies worldwide, making it the most successful fighting game franchise. I think that proves the strategy chosen was the correct one."

As the smug grin subsides, we move onto the third game, one widely renowned as one of the best of its time. As previously stated, it was around this time that Harada and his team really started to focus on gameplay to the same degree as presentation and it shows – there's a level of depth here that arguably wouldn't be beaten until *Virtua Fighter 4* rolled around some time later. It's the best performer out of all of the *Tekken* games too, but is it the best? Harada offers a surprisingly diplomatic response, considering we've effectively just asked him to review his own children. "*Tekken 3* did very well in the arcades, and sold well for many years on the console," he says. "The console sales ended up being 8.3 million copies! If you just look at the numbers, I guess you could say *Tekken 3* was the most ▶



» [PlayStation] The training mode in the third game was as comprehensive as any other.



» [PlayStation] Lei's a flashy fighter, but few can master his confusing multiple stances.

GET THE PRIZE

A handful of the other crazy tournaments from the rest of gaming



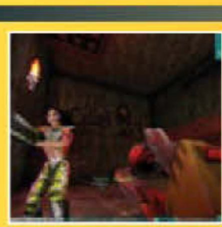
SUPER MARIO KART

■ We've seen just how keen residents of the Mushroom Kingdom are to try out all kinds of different pastimes, but you'd think the governing body behind this racing tournament would screen its drivers – known criminals, kidnappers, vandals and hoodlums are as free to compete as the squeaky clean guys.



RIBBIT KING

■ The world is running low on fuel. The solution? Give away what scraps remain as prizes in a interplanetary Frolf competition. What is Frolf, you ask? It's golf played with frogs rather than balls, the little croakers hopping around of their own accord after a shot. This PS2/GameCube oddity is a technical mess, but it's a riot in multiplayer.



UNREAL TOURNAMENT

■ There's a delicious aftertaste of irony in the fact that a game based around a virtual sports event for the pleasure of others became one of the first major games on the eSports scene. Few players will remember the premise, though, because it just simply doesn't matter. It's just a damn fine multiplayer shooter.



POKÉMON

■ The rules aren't quite as well defined here as they are for most competitions – it seems to be the case that whoever beats the Elite Four and the reigning champ gets to call themselves the champion, even though the king is never actually dethroned. Still, that epic journey to catch 'em all and beat the best is one we could (and do) play over and over.



FINAL FANTASY X

■ Battle tournaments are commonplace in role-playing games, but this is something quite different. While Blitzball wasn't the primary focus of *FFX* (or at least wasn't meant to be – curse our addictive personalities), Tidus's back-story and the rewards from playing made grinding out entire seasons essential for a 100 per cent run.



CHAOS

■ The Wizard's Duel in *The Sword In The Stone* has nothing on this, Julian Gollop's Spectrum masterpiece pitting up to eight wizards against one another in the ultimate test of wits, cunning and Gooey Blobs. Crowdfunding on a brand new Chaos game has not long begun – hopefully, we won't have invested too much in an illusion this time.

KILLER COMBOS

The ten-hit strings we'll never forget



successful. I have a lot of good personal memories from that instalment as well. That said, I don't consider it as the best *Tekken*. *5* and *6* were also quite successful and well received. They even maintained the top spot in the arcades for five consecutive years."

As you can probably gather, Harada won't offer a personal favourite, rather reasoning that he learns from creating each iteration. *Tekken 3*'s assortment of odd extra modes, from bizarre mini-game Tekken Ball to chicken-flavoured side-scrolling mode Tekken Force, offered value far beyond the simple arcade ports that were common, and were as we've now learned funded by the game's coin-op success. But what was it that made the team want to give something back to the community like this? Harada's answer is succinct.

"The omotenashi (hospitality) mentality of Japanese," he states. "At the time, Namco was raking in money, and arcades were doing extremely well. Since the consumers were giving us so much support, it was only natural to do our utmost to please them in return." This kickstarted a revolution in fighters too, with Time Attack and Arcade modes no longer enough – players demanded more, leading to console-only fighters like later *Mortal Kombat* games offering crazy amounts of single-player and unlockable content. Many of the additional modes were simply throwaway novelties, but even the most whimsical of them all had a grounding in the core fighting experience. "Tekken Ball was the result of me originally trying to make a mini-game to practice aerial combos," Harada explains – we can process that, but any attempt to link a hardcore 3D fighting game and ten-pin bowling continues to blow our tiny minds.

No franchise can go 20 years without a disaster or ten, though, and Harada's go-to example came pretty early on in the series' life. "There's one memory that stands out," he says when asked about developmental developments. "At the time, a person who was like a leader of development quit and joined another company, taking many of the designers and programmers that had joined the company at the same time as me. I was very surprised!" It's not uncommon in this industry, but we can't imagine this kind of observation makes it any easier to deal with this kind of mass exodus. "We were actually put in the position that we were unable to develop the next *Tekken* or *Soul Blade*," Harada reveals. "It took much effort to rebuild the development team. We had to redo everything, basically starting from scratch."



» [PlayStation 2] Marduk's ground-and-pound MMA style feels really weighty and brutal.


» [Xbox 360] How many other fighters allow an old man to punch out a kangaroo?


» [Xbox 360] Tekken Force: rubbish no matter how much better it looks on new hardware.


» [PlayStation 2] *Tekken Tag*'s innovative mechanics helped it stand out at the time.


» [Xbox 360] *Tag*'s evolution allows for some insane combos once you master the engine.

> **"In game development, failures often teach us quite a lot"**
> Katsuhiro Harada

This might go some way to explaining the next two games in the timeline – *Tekken Tag Tournament* was effectively a greatest hits package with a neat new mechanic, while *Tekken 4* went wildly off-template and made fundamental changes to several crucial aspects of the game, attracting a fair amount of criticism for doing so. We ask whether Sony had wanted *Tag* to be a launch title for the PlayStation 2 following the successful collaboration between the two brands the generation before, but Harada laughs off the idea. "There wasn't much discussion on whether to make *Tekken Tag* a launch title," he tells us. "That was the role of *Ridge Racer*. *Tag* just came along at the right time."

Similarly, the question of making the non-insignificant leap from PlayStation hardware to PS2 (with its all-powerful Emotion Engine) seems equally easy for the *Tekken* boss, but then he wouldn't have been the one doing the coding. "There wasn't much that we had trouble with regarding the technology," he says. "Actually, the tough part was that the number of polygons increased drastically, and we were struggling to find a way to use this increased power effectively."

But find it they did – *Tekken Tag* looked great at the time and *4* looked even better when it turned up, even if it did follow the odd mantra of 'if it's not broke, fix it until it is'. As is always the case, some gamers who hadn't really gotten on with the series in the past will tell you how much they love this one that breaks from tradition, but the majority wanted tradition back. Moving the emphasis away from juggle combos and onto spatial positioning was an interesting move but not one that paid off, although that doesn't seem to have hurt the franchise. If anything, it has actually helped. "It was because of the failure of *Tekken 4* that we are successful today," Harada claims. "In game development, failures often teach us quite a lot. That's why I think there was a lot things in that game that are worth looking at."

After *4*, it's hardly surprising that core series *Tekken* games haven't taken any risks, at least not to that level – the Rage mechanic of *Tekken 6* sails a little too close to today's odd obsession with comeback mechanics, but it's no better, worse or more effective than Garou's TOP system so we'll let it go. Both *Tekken 5* and *6* played things relatively safe, the core fighting returning to the template laid out by *3* and with all the same kind of frippery laid about around it to keep fans happy whether they were fighting or not. Customisation was the big new thing – *SoulCalibur*'s creation suite it may not be, but the dress-up mode in modern *Tekken* games is still fun to play around with all the same.

And so we come to *Tekken*'s latest outing. No, not the iOS card game, although that is surprisingly good fun. We're talking about *Tekken Revolution*, the free-to-play PS3 game that has already been downloaded by over 3 million players. It just goes to show how much the world has changed – *Tekken 3* sells over 8 million but today, Namco can only give away 3 million copies of *Revolution* – but Harada seems happy with how it's all going. "We were able to gain a lot of feedback, so I am satisfied," he states, but he does have an odd confession to make. "If I were to give my honest answer to whether fighting games are well suited to F2P, I would say no. This is because the basic game model was born in the arcade, coin operation-based environment from 20 years ago. Currently popular genres such as team battles, four-player co-op and RPGs are probably better suited. Or perhaps changing the fundamental gameplay, like in *SoulCalibur: Lost Swords*."

Even two decades on, Harada still has a passion for his franchise and a bunch of interesting new ideas on where to take it. The free-to-play experiment isn't the sign of the end of *Tekken* as we know it – as long as the arcade culture on which Namco evidently thrives is still there, we can still expect new main series *Tekken* games, only perhaps subsidised by this kind of spin-off. And best of all, two decades in, Harada still dreams big. "To create a game which everyone says 'Now that is exactly what I have been waiting for!' That is my goal," he closes. *

SPECIAL MOVIES

The fighters that have tried (and failed) to take on Hollywood

STREET FIGHTER: THE MOVIE (1994)



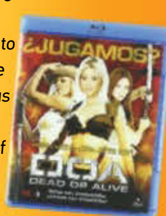
■ *A classic for all the wrong reasons, with a script written by someone who had no idea about the game. Raul Julia's final role serves up the best bits – "For you, the day Bison graced your village was the most important day of your life," he taunts Chun-Li. "But for me, it was Tuesday."*

MORTAL KOMBAT (1995)



■ *Some fighter-based movies shy away from the hokey nonsense that surrounds the game's ludicrous canon, but Mortal Kombat fully embraces it and it works. It's still rubbish, obviously, but in terms of sheer fun, the Mortal Kombat movies are among the best examples of videogame-based silver screen silliness going.*

DOA: DEAD OR ALIVE (2006)



■ *The only movie here to really 'get' its source material, DOA is a gratuitous 87 minutes of teen titilation thanks to sexy ladies, buff dudes and more sexy ladies squaring off in various unsuitable outfits. Jaime Pressly kills it as Tina – too bad the rest of the bunch are either terribly cast or just terrible by comparison.*

THE KING OF FIGHTERS (2010)



■ *Once again we turn to the casting department with a giant question mark over our heads – casting an American dude as Kyo, Maggie Q as Mai and Ray Park (aka Star Wars baddie Darth Maul and Toad in X-Men) as big boss man Rugal. We're surprised they didn't get Stephen Fry to play Terry Bogard. Perhaps he was busy.*

TEKKEN (2010)



■ *The characters' nonsensical back-stories and reasons for competing in the Iron Fist should make for an awesome movie before the fights even start. But director Dwight H Little plays things a bit too straight here – this is far from the worst movie on this rundown, but perhaps the most forgettable.*



ROGUES GALLERY

A cross section of Tekken's enormous cast

1 KING F/S: Wrestling

2 CHRISTIE F/S: Capoeira

3 MOKUJIN F/S: Mokujin-ken

4 LARS F/S: Karate

5 PANDA F/S: Advanced Bear Fighting

6 BOB F/S: Freestyle Karate

7 BRUCE F/S: Muay Thai Kickboxing

8 ALISA F/S: Humanoid Cyborg Combat

9 ZAFINA F/S: Ancient Assasination Arts

10 NINA F/S: Koppo

11 PAUL F/S: Judo

12 STEVE F/S: Boxing

13 LAW F/S: Jeet Kune Do

14 RAVEN F/S: Ninjitsu

15 ASUKA F/S: Kazama Style traditional



F/S = FIGHTING STYLE

- **16 HWOARANG** F/S: Taekwondo
- **17 JIN** F/S: Karate
- **18 KAZUYA** F/S: Advanced Mishima style
- **19 ARMOR KING** F/S: Wrestling
- **20 EDDY** F/S: Capoeira
- **21 LEO** F/S: Bajiquan
- **22 LILI** F/S: Street fighting
- **23 XIAOYU** F/S: Hakke Sho/ Hika Ken
- **24 HEIKACHI** F/S: Mishima-Style Karate
- **25 BAEK** F/S: Taekwondo
- **26 KUMA** F/S: Advanced Bear Fighting
- **27 ANNA** F/S: Koppo
- **28 MIGUEL** F/S: Brawling
- **29 WANG** F/S: Xing Yi Quan
- **30 JULIA** F/S: Kenpo/Wushu



Rock N' Roll Racing

GET YOUR MOTOR RUNNIN'

» RETROREVIVAL

» **SNES**
» **Blizzard**
» **1994**

As a kid, I was frequently exposed to my dad's musical taste while in the car. This was usually a good thing as the likes of Motörhead and Deep Purple were staples, though I really could have done without the Tom Jones. When the time came for a long journey, two particular standouts were definitely getting played soon after we set off – *Bad To The Bone* by George Thorogood And The Destroyers and Steppenwolf's *Born To Be Wild*.

It turns out that I wasn't the only person to associate these songs with driving, as long before finding massive success with *Warcraft*, *Diablo* and *StarCraft*, Blizzard produced *Rock N' Roll Racing*. The game just happened to contain both of those tracks, as well as Black Sabbath's *Paranoid* and other hits from the classic rock stable. I never had *Rock N' Roll Racing* as a kid, but the soundtrack takes me right back anyway.

While it doesn't have the legacy of other games in Blizzard's back catalogue, *Rock N' Roll Racing* still provides a great racing experience. The basic gameplay is similar to the team's previous racer, *RPM Racing*, which itself wasn't too different to *RC Pro-Am*. Sharing the same isometric perspective, *Rock N' Roll Racing* had a greater focus on combat and a long, involving season taking place across different planets. It also has a great two-player mode, so if you're looking for an alternative to *Micro Machines* in your multiplayer rotation, it's well worth digging out. *


1
1
4TH


LAPS


PLAYER 1
MONEY:
$2,000
CHEM VI
DIVISION B
RACES RUN
0 OF 8
SCORE
NEED: 1400
HAVE: 0
FIX


COLA
2ND
3RD

LEGENDS OF LORE

Lore Design might not be one of the big names of our industry or the most famous, but this little software house from Liverpool has an interesting story to tell that starts outside of videogaming. Kieren Hawken takes a trip down the Mersey to hear its tale

The story of Lore Games, as it was originally known, revolves around one key person – Stephen Mitchell, a humble yet highly accomplished fellow who first set up the company while still in full-time education. But not to make videogames, Steve was really into the popular play-by-mail (PBM) games of the time. Intricate, story-driven role-play games where you planned out your next moves on a card and then stuck them in the post to be analysed by the creators. Then days, maybe weeks, afterwards you would receive the next part of the story through your letterbox and continue the game. This was well before vast RPGs like *Final Fantasy* and *Baldur's Gate* started to appear and kids around the UK were eagerly pestering mum and dad for stamps and postal orders to play the latest PBM quest or football management challenge.

Steve remembers those halcyon days well. "I had been play-by-mail for some years and played games like KJC's *It's A Crime*, which I think is still going as an e-game online in a more modern form, and whilst at university I also played *Diplomacy* by post which is a great introduction to turn-based games online today." This love of PBM encouraged Steve to give it a try himself, but the first thing that he needed to do was create a computer program for the game to run from to simulate the turns and outcomes. "I probably started coding on my first ST in 1987 but I started programming quite young. I'm only 44 today and started programming on a Commodore PET in 1980 and then on the ZX81 in 1981," Steve articulates. From there his first

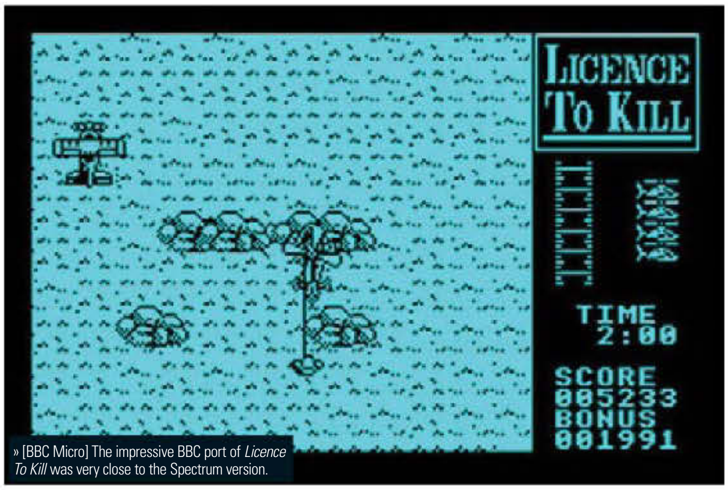


» [Spectrum] *Vindicators* was an early conversion that was handled by Lore Games for Consult Computer Systems.



game gradually progressed, with new features being added between lectures and during the holidays while still a student at University of Manchester Institute of Science and Technology (UMIST). We spotted a moment of wonder in Steve's eyes as he pondered over the vast gulf in technology from what they had to use then to the powerful PCs of the present day "Looking back, I was really pushing the edge of what was affordable in computing," adding, "back then getting the whole thing to run on a 4Mb computer and storing several databases' worth of data on a 60Mb hard drive was pushing the limits!"

For the tech heads out there Steve has kindly gone into more detail for you on just what kind of set-up running a huge PBM game required. "I started with a 512K Atari ST and later got a [hard drive] as my files were too large for a floppy disk. I had to hand solder a RAM upgrade onto the ST motherboard – it was a bit later before I upgraded to the MegaST-4 which was the largest amount of internal RAM you could support on the ST system. Yep, only four megabytes back then!" He was a big fan of the Atari ST though, as he goes on to explain: "The Mega ST was a really nice computer, especially with the matching paper-white monochrome monitors that made it much easier on the eyes than using a green screen terminal."



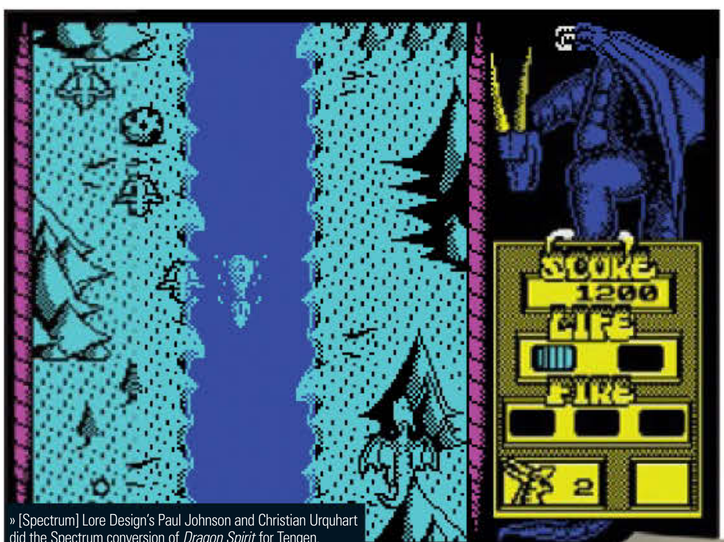
» [BBC Micro] The impressive BBC port of *Licence To Kill* was very close to the Spectrum version.

"The one thing I remember was that Steve's mum made the best cheese, lettuce and pickle sandwiches!"
CHRISTIAN URQUHART

With the set-up for his first game starting to take shape, Steve needed some inspiration. "The game rules and data themselves were created using a game I had developed myself whilst still taking my A levels called *Of The Empire*." This game would become *Lore Lords Of Britain*, a vast role-play adventure that would become one of the most popular PBM games in the UK. Steve adds a bit more to the story for us. "I beta released *LLOB* with friends in 1988 with the first map, but the manuals and artwork for covers didn't come out until 1989." He fully launched the game later on in 1989 and Lore Games was officially born. Intrigued to find out how the game worked we managed to get Steve to delve into it a bit more. "There were a maximum of 40 players per game, with four leaders and cities per player. Although typically the games started with 20 to 30 people and some neutral players." He quickly retorts, "I should also note that a single game could run over several years in some cases, and people think today's RPGs have a long playtime!"

IN THE KNOW

- *Highlander* was a launch game for the ill-fated Jaguar CD add-on and retailed at £49.99. The game also featured voiceovers by the real actors of the animated series.
- Originally known as Lore Games, the company originally produced one of the most popular play-by-mail games in the UK.
- Lore Design had a state of the art motion capture studio paid for completely by Atari.
- Steve Mitchell developed a clever game engine for the Lynx that could be adapted for multiple games.
- Lore Design's Christian Urquhart is credited for 18 games on World Of Spectrum with an impressive softography score of 7.15.
- The company was started while owner Steve Mitchell was still in full-time education.
- Lore were one of only a few British companies to produce games for the American Atari Lynx handheld.
- The first games produced by Lore were for everyone's favourite educational computer, the BBC Micro.
- All of its Atari Lynx games contain a cartoon-style intro depicting the story, something it became well known for.



» [Spectrum] Lore Design's Paul Johnson and Christian Urquhart did the Spectrum conversion of *Dragon Spirit* for Tengen.

» The Atari Mega ST-4 was Lore Design's development machine of choice.



» *Lore Lords of Britain* was one of the UK's most popular play-by-mail games.



» [Lynx] Insert cheap plug for other Lore Design games here!



TIMELINE

1987 STEVE MITCHELL STARTED WORK ON WHAT WOULD BECOME HIS FIRST PLAY-BY-MAIL RPG ON AN ATARI ST. IT WOULD BE BETA TESTED FOR THE NEXT YEAR OR SO AMONG FRIENDS.

1988 LORE DESIGN DEVELOPS AND RELEASES ITS FIRST GAME, RETURN OF THE JEDI, FOR DOMARK AND CONSULT COMPUTER SYSTEMS.

1989 LICENCE TO KILL IS PUBLISHED, AGAIN BY DOMARK, FOR THE BBC MICRO TO GREAT ACCLAIM FROM USERS.

1990 LORE GAMES (AS IT WAS THEN KNOWN) RELEASES GAME TWO OF ITS HUGELY POPULAR PBM GAME LORE LORDS OF BRITAIN.

1992 LORE DESIGN RELEASES ITS FIRST LYNX GAME. THE MADCAP BEAT-'EM-UP IS PUBLISHED BY ATARI ITSELF.

1994 TELEGAMES RELEASES THE FIRST OF TWO GAMES BY LORE DESIGN, THE INVENTIVE ARCADE ADVENTURE BUBBLE TROUBLE.

1995 HIGHLANDER FOR THE JAGUAR CD IS PUBLISHED BY ATARI AS A LAUNCH TITLE FOR THE MUCH MALIGNED ADD-ON.

1997 SAD NEWS FOR LORE AS A DISPUTE WITH THE THEN ATARI CORP ON FUTURE TITLES RESULTED IN THE INSOLVENCY AND ULTIMATELY THE VOLUNTARY RECEIVERSHIP OF THE BUSINESS.

2010 LORE DESIGN HAS ONE LAST HURRAH AS A NEAR-COMPLETE PROTOTYPE OF LYNX TITLE HOT DOG IS FOUND AND PUBLISHED BY BETA PHASE GAMES.



» A powerhouse of Atari development was hidden behind these office walls.

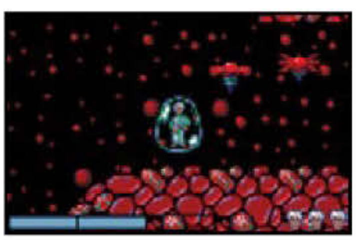


» The Lore Design motion capture studio in full effect.

> **"I don't know many people who would quit today over ROM budget!"**
> STEVE MITCHELL



» [Lynx] *Bubble Trouble* featured a hapless scientist whose experiments with shrink rays had gone horribly wrong.



» [Lynx] *Bubble Trouble* was almost a victim of Atari's Jaguar refocus, but found a new publisher.



Lore Lords Of Britain was doing very well, but Steve was eager to earn some more money while on a gap year from university, and he quickly realised that with his vast coding knowledge videogames could be a good little earner. Then, through a chance meeting with people from local game developer Consult Computer Systems, fate began to take course.

Consult was a conversion house that helped major publishers port their games to other systems. One such company was Domark, as Steve explains. "[Domark] did not have an in-house engineer for BBC Micro conversions as it was considered niche, so they brought in contractors such as Consult to work on these." But Consult itself was also looking for people to sub-contract to, and this is where Lore came in. Steve goes into more detail for us, saying, "Whilst on a gap year I was brought in to work on a conversion of Atari's *Return Of The Jedi* for the BBC." This was followed up by another great game based on a movie. "Chris Lowe, a college friend, worked with me on the *Licence To Kill* game for the BBC, which was also published by Domark the following year." This is where Lore Design really started to take shape and other people such as Chris Urquhart and Paul Johnson joined the team.

"I'd met Paul and Christian whilst contracting for Consult," Steve recalls, before explaining the foundations of this relationship "Working with Christian taught me a lot about gameplay and Paul was an inspired artist who could script whole games himself and proved to be a good at business too." While the company was founded to do the PBM game *Lore Lords Of Britain*, which ended up running for most of the life of the business, videogames were proving to be a very good progression for Lore and were opening up lots of new avenues. One of these was the exploding console market, and this would be Lore's next port of call.

Jack Tramiel's Atari was looking for developers to make games for its powerful Lynx handheld. As an Atari fan himself Steve saw this as a great opportunity to work with one of the greatest names in gaming. Lore Design was soon in receipt of its own Lynx development kit, and Steve was impressed. "I personally loved making Lynx games and would still code for it if I had a development kit; it really was a pleasure to work with." Christian Urquhart remembers the events that led up to this well too. "I knew Steve from when I was working at Consult Software and he did some freelance work for them," he reminisces. "Steve had worked out a deal with Atari to create a game for the new Atari Lynx and he was looking to put together a small team to do the work." What was unusual about this was that Christian, a highly accomplished programmer who had worked on numerous titles, was currently out of the games industry. "I had taken a year out and was in a Sales job," he remarks, before adding, "I was doing okay, but I've got to tell you I did miss programming – it has been and will always be a love of mine." So it was an easy choice for Christian to





» The inside of the Lore Design development studio with a Jaguar CD dev kit at the forefront.



THE DNA OF… LORE DESIGN

Engines
One thing Lore Design did very well was write brilliant game engines. Steve Mitchell made a flicker-free monochrome display for the BBC Micro that could be reused for other games and then he went on to create a universal engine for the Atari Lynx that could easily be ported over to other projects.

Story Time
Lore Design always knew how to tell a good story, and its extensive prior experience in the world of play-by-mail role-playing games probably had a notable influence on this. Several of its Atari Lynx games had very creative stories attached to them and even animated intros to help tell them!

Teamwork
The whole team at Lore was very supportive and helped each other out on every project. Even after the demise of the company the people involved stayed close and continued to work together in new companies. Their relationships with Domark and Consult Computer Systems are also testament to this.

Atarians
The first game that Lore ever worked on was a conversion of an Atari arcade game, *Return Of The Jedi*, and this is something that stuck with the company as it went on to become a key developer for Atari Corporation. Lore's programmers also worked on several other Tengen games for Domark too.

Character Building
As well as the storytelling present in its games, Lore also liked to promote strong characters too. In all its Lynx games it created new personalities to lead them and made them the central focus of the game. Even its early titles featured the likes of James Bond and Luke Skywalker.

» One of the return sheets used for Lore's popular PBM game complete with entries!


Lore Lords of Britain

make: "I decided that this was what I really wanted to do so I agreed and the first game we worked on was *Kung Food* for the Lynx."

Steve had given Atari the impression that Lore was a professional software house and just the one it needed, but Christian pipes up about the company's more humble beginnings. "The office was originally set up [in] Steve's house and the one thing I remember about this was that his mum made the best cheese, lettuce and pickle sandwiches!" Lore was quickly faced with several challenges around this time as it tried to transform itself into a major developer, and Christian explains the pressure it was under from Atari. "I think the biggest challenges were really that it was a new system and Atari wanted the product ASAP – what's a console without software? Not a lot!" He recalls one specific problem. "Getting multiplayer to work was the most challenging, but a lot of fun at the same time." *Kung Food*, a madcap scrolling beat-'em-up, received positive reviews in the press with *Games Master* awarding it a respectable 72 per cent (likening it to a cheesy B-movie) while *Games Zone* magazine rated a more impressive 80 per cent (commenting on the excellent graphics). Lore Design went on to develop more games for the Atari Lynx, all of which were met with praise from the often-critical press.

In 1993 the relationship with Atari came to an unexpected halt when Jack Tramiel put all Lynx projects on hold to concentrate on the new Jaguar console. Atari was very short of money and thin on resources, needing every penny it had to get the system off the ground, a decision that perhaps wasn't a good one in hindsight. Steve still had to make a living so he put Lore Design 'on hold' and accepted a job working in-house for Sega in the US. But this didn't really turn out as expected, as Steve goes on to explain. "I started on a port of the *World Heroes* arcade game to the Genesis, but then quit Sega when they slashed my cartridge memory budget, as it would have crippled the direct coded port approach I was committed to." Steve was always one to stick by his own ideals: "I was very much the purist back then when it came to porting work. I don't know many people who would quit today over ROM budget!" ▶

» [Lynx] Lore's lost Lynx game *Hot Dog* was finally released by Beta Phase Games in 2010.





» [Lynx] All of Lore Design's games had stunning intro sequences.



» [Lore Design's conversion of *Return Of The Jedi*

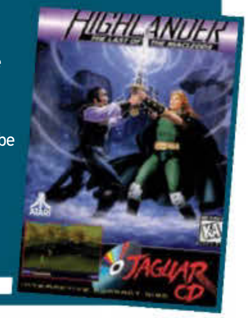

» [PC] *Highlander* featured over half an hour of footage from the animated series.


» [Jaguar] *Highlander*'s pre-rendered backdrops took advantage of the Jaguar CD

THERE CAN ONLY BE ONE!

The story of the lost Highlanders

Lore Design's *Highlander* game for Atari was supposed to be part of a trilogy, but only the original game saw a release for the Jaguar CD and PC. It had long been rumoured that both the second and third game had been completed. People had also speculated that a collector was indeed in possession of both games. Indeed, it was teased on website Jaguar Sector II last year that somebody did have *Highlander 2*, at least when a photo of a gold prototype CD was posted; whether it was real or not is another matter. We chose to speak to Lore's Steve Mitchell instead for the real answer. "Both sequels were in production but unreleased," he states, before adding, "As they were licensed games and those licences had expired I can't imagine there being any official versions released." He goes on to further tease the existence of them: "However, it's not impossible that something may be out there, either from testing, Atari or an ex-Lore member. So I can't squash the rumour, though I'd be surprised if it was a final version." So there we have it; *Highlander 2* could in fact be out there, but *Highlander 3* was only ever at the planning stage.



> "I distinctly recall Jeff Minter telling the testers to put the bog roll in the fridge!" STEVE MITCHELL

WHERE ARE THEY NOW?



Steve Mitchell

Around the time of Lore's demise Steve had just gotten married and started a family. After a short break he became development manager (internal) at SCEE in London. Whilst there he produced *Total NBA '97* and *NBA ShootOut 97* (US) before returning north and founding Diamond Apple Ltd in 1998. The company specialises in bespoke technology development and designs for internet connected CE, 'Cloud', Android and iOS-based technologies (with and without middleware such as Unity 3D). He still runs Diamond Apple to this day as well as heading up its gaming studio, The Liverpool Office, making games for the PlayStation Vita and various mobile platforms.

Paul Johnson and Andrew Harris

After leaving Lore Design many of the team stayed in the north-west and joined newly formed company Magenta Software. Paul and Andrew were the founders of Magenta and still run the company today, developing games for major publishers such as Sony, Atari, Disney and Vivendi. Among the titles they have produced are the *Buzz! Junior* series (which won a BAFTA), Disney's *Think Fast!* and the upcoming *Invizimals* for PS3 and Vita.

Christian Urquhart

Chris has a storied history in the videogames industry. He started off at Ocean Software where he programmed the Spectrum version of *Hunchback* followed by the hugely successful *Daley Thompson's Decathlon*. From there he went on to develop many more games for the Sinclair machine including *Little Puff* for Codemasters and *Snoopy* for The Edge. After various freelancing jobs he formed Purple Zoo Productions making apps for modern mobile devices such as *Dragon Quest* and *Jigsaw Magic*.



The game ended up being reprogrammed by somebody else and then released by Sega, so it would be somewhat remiss for us not to ask what Steve thought of that version. "Someone else was hired to do the job on the smaller cart and, in my opinion, was not able to do the arcade classic justice, probably due to the memory constraints in all fairness." Steve didn't think going to the US was a complete waste of time though. "I did enjoy my time living and working in the US overall. I ended up turning down a different job in the US after Sega and instead moved back to the UK to restart Lore." Steve definitely seems to have been proved right in his convictions, as the released Genesis version of *World Heroes* received very average reviews and was widely criticised for lacking many of the features that made the original Neo Geo version so great.

It wasn't long before Atari came calling again, as Steve explains. "Atari licensed the Highlander animated series for a Jaguar CD game. They picked Lore to develop it as we had completed several Lynx games and Dave Worton, who worked with me on some of them, had started working with 3D Studio on a pre-rendered Z-buffered backdrop that allowed for the limited polygon characters that were needed for the Jaguar system and the *Alone In The Dark*-style perspective that Atari had picked for the game." Steve touches on what it was like to work with the machine. "Personally I much preferred the Lynx over the Jaguar for development. Generally cartridge consoles had not only RAM but also ROM to work from directly. Adding the CD meant reads had to be cached into your RAM instead of just sitting in the ROM making the CD system less potent that the straight cartridge system."

He then compares it to the rival PlayStation, which he later went to work on. "The PlayStation was a much nicer console to develop for than the Jaguar, with better tools, eight times more effective RAM and it could do basic texture mapping. Despite the lack of experience they also offered excellent support, something Atari and the Jaguar didn't have." His memories of the Jaguar aren't all bad though, and he recalls one particular story starring the Yak himself. "Whilst visiting Atari in the mid-Nineties I was invited to a meal with Jeff Minter and some Atari QA guys; this was around the time Jeff was making the seminal Jaguar title *Tempest 2000*. Jeff had taken us to a curry house he'd found near the Sunnyvale Atari offices in the Bay Area where he had persuaded the proprietors to serve Vindaloo-strength curry to the Atari employees. I distinctly recall him telling the testers, at some point before the meal, to put the bog



» [Spectrum] Lore Design did a decent job of emulating Vindicators' interesting control system.



» Lore was a major contributor to the Lynx software library, even after Atari's support ended.

roll in the fridge, followed by wry smile!" Stopping for a giggle himself, Steve adds "Jeff's time in California was legendary amongst the Atari Corp team at the time. I can confirm that the curry was good but I do not know if the QA guys took his advice!" *Highlander* received mixed reviews from the press of the time – while some people praised it for its stunning 65,000 colour pre-rendered backdrops, others criticised the awkward controls and kooky looking main character.

Sadly the Jaguar's failure in the market and Atari's imminent demise hit Lore Design hard. The completed second game never made it out the door and the third game in the trilogy was stopped suddenly into production. Without the money coming in from Atari the company had nowhere to go and was forced into bankruptcy. Steve remembers this with great sorrow. "Sadly *Highlander* was the last game we completed as a dispute with Atari Corp on money owed for future titles resulted in the insolvency and ultimately the voluntary receivership of the business."

Lore's unreleased games have been a big topic in the Atari community ever since so it wasn't long before people started to hunt down Steve Mitchell to find out what happened to these games, as he explains. "Someone called Jonathon Nagelkerk had contacted me who was in possession of an unfinished prototype of a Lynx game we developed called *Hot Dog*." This came as a surprise to Steve, who could only assume it had come from Atari's testing department. He was pleased by what they had discovered. "Jonathon or some people he knew had figured out how to build and edit *Hot Dog* and release it; they did this with both the blessing of myself and Paul Johnson who coded it."

Beta Phase Games published *Hot Dog* in 2010 in limited numbers and it sold out within days, meaning Lore Design did have one last success. But that is not quite the end of the story; after having worked for Sony as a development manager at its Soho office, Steve set up his own company again, this time going by the name of Diamond Apple. From this he has set up a new games studio called The Liverpool Office to specialise in mobile and handheld platforms, a project Steve is very excited about. "To bring the timeline up to date, Jakes Mo and I have a team right now which is getting it's own motion capture studio – nearly 20 years after our last motion capture studio for *Highlander*! We have just developed a puzzle game title for PlayStation Vita." So Lore Design might no longer be around in name, but it certainly is in spirit, and Steve Mitchell is once again producing games for a powerful handheld system.

Special thanks to: Steve Mitchell, Paul Johnson, Christian Urquhart and Andrew Harris

DEFINING GAMES



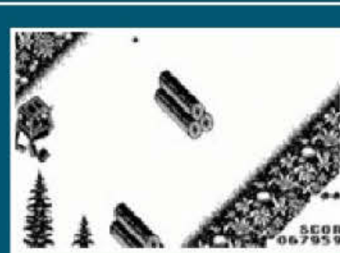
Highlander

The name might fool you into thinking this is a game based on the cult movie starring Christopher Lambert, but it is in fact based upon the Gaumont Television cartoon series. It's a vast adventure game that uses 3D motion-captured characters with pre-rendered backdrops, much like the original *Resident Evil*, and also features over 30 minutes of video taken right from the TV show. *Highlander* was a launch game for the Jaguar CD and was subsequently converted to the PC with improved character models.



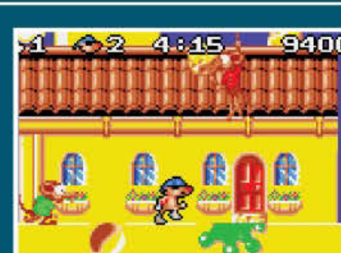
Kung Food

The bizarrely named *Kung Food* was the first title that Lore Design produced for the Atari Lynx. It takes the form of a scrolling beat-'em-up with a wacky plot that sees you fighting through your own fridge! Standing in your way are evil cabbages, violent carrots, suicidal sprouts and, of course, rotten tomatoes that are all intent on killing you! It seems to be a bit of a Marmite game for Lynx fans, but we were impressed with its great graphics and sound, intro and comedy value that all add up to make this an enjoyable portable pummeler.



Return Of The Jedi

A conversion of the Atari arcade game that is based upon the third part of the original *Star Wars* trilogy, this was the first videogame to be programmed by Lore Design. This translation of the game is all monochrome to take advantage of the BBC's high-resolution mode but makes up for in playability what it lacks in colour. Lore Design developed a double buffer screen display meaning it didn't have the flicker associated with many for the micro. This clever technique was re-used in all of its BBC Micro games including the excellent *Licence To Kill*.



Hot Dog

This platformer for the Lynx is notable for several reasons. Firstly, *Hot Dog* was created as mascot for the Lynx, a character to rival Sonic on the Game Gear and Mario on the Game Boy. Sadly the game was abandoned when it was quite close to completion, because Atari wanted to concentrate on the Jaguar and wanted Lore to work on *Highlander* instead. The other interesting fact about *Hot Dog* is that it was the last Lore Design game released when it was found and officially published by Beta Phase Games at the end of 2010.



BIO

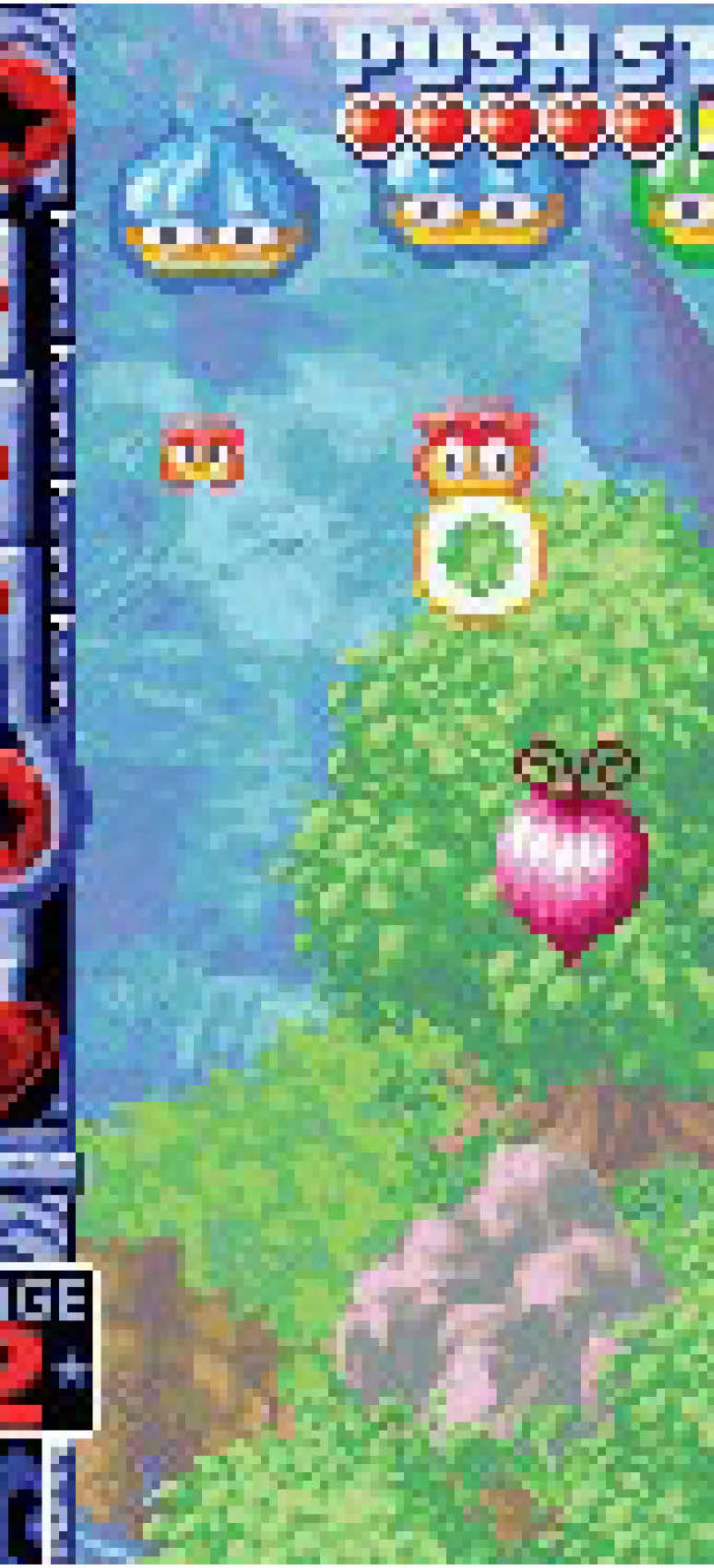
Twinkle Star Sprites is an odd little shoot-'em-up as it cleverly blends the high-paced carnage of most shooters with the competitiveness found in most versus-based puzzle games. First released in 1997, it's a delightfully nutty blaster that captures the manic gameplay of *Parodius* and *The Game Paradise* and fills it with bizarre characters and suitable silly power-ups. Originally released in the arcade, it's been ported to numerous consoles, from the Neo Geo to the Sega Saturn and Dreamcast. A sequel, *Twinkle Star Sprites: La Petite Princesse* was released in Japan in 2005, but never reached the West.

CLASSIC MOMENTS

Twinkle Star Sprites

» **PLATFORM:** ARCADE
» **DEVELOPER:** ADK CORPORATION
» **RELEASED:** 1996

Smart bombs have become a stable part of the shoot-'em-up genre, but few are as grandiose or as over-the-top as the ridiculous ones that get launched in *Twinkle Star Sprites*. As with most smart bombs, their aim is simple: to clear up the on-screen enemies, leaving a safe route. The bombs in *Sprites* do the same job but are far more surreal, ranging from Load Ran's gigantic smiley star, to Yan Yanyung's stream of flying, flaming pigs. Our favourite, however, is Kim's gigantic cat, who happily appears only to get washed away by a huge wave of water that takes out him and everything else. *



MORE CLASSIC TWINKLE STAR SPRITES MOMENTS

Anyone for tennis?



Shooting down a wave of enemies in *Twinkle Star Sprites* sends them over to your opponent's side of the screen, where they appear as fireballs. The great thing here though is that you can either avoid them or choose to shoot them in order to return them to their play area. As a result many games turn into a loopy version of tennis where you're both trying to return never-ending amounts of volleys.

You're riding a what now?



There's a huge number of super cute characters that you can control in *Twinkle Star Sprites*. While several of them have the power of flight, quite a few have to rely on a selection of rides ranging from coloured crayons to cute green dragons and flying griffons in order to get around. Our favourite, however, is easily Yan Yanyung, who gets to ride around on the back of an impossibly cute flying pig.

Saturn worship



When you play the Saturn version, you realise just how much care and attention can go into a port. While it still features loading times and slowdown, a whole host of great little extras have been included. In addition to a cute anime intro, there are full voices for cut-scenes, you can carry over your power meter after dying and there's even a brand new character called Meirin, who has an affinity for pandas.

Playing with pals



As with many versus games, *Twinkle Star Sprites* really comes alive when actually playing against a human opponent. While the computer AI puts up a stiff fight, it's a whole new game when you're playing against an equally skilled player who's determined to win at all costs. The aforementioned tennis volleys become even more frantic, while the sheers satisfaction from beating a skilled friend really can't be beat.

THE Bluffer's guide TO





SCROLLING BEAT-'EM-UPS

From Kung-Fu Master to Castle Crashers, the scrolling beat-'em-up has had an incredibly long shelf life by videogame standards. Mike Bevan looks back at a history of punching, flying-kicking and saving your girlfriend from the big boss







For fans of revered martial-artist Bruce Lee, the movie *Game Of Death* holds fateful significance. It was the feature he'd been working on prior to his untimely demise, and that famous yellow tracksuit aside, it posseses another unusual claim to fame. In the original script for the movie, it was intended that Bruce would fight his way through a five-tiered pagoda, encountering ever more challenging opponents on each floor. It's a plot-device that became the basis for what is regarded to be the first arcade scrolling beat-'em-up, Irem's *Spartan X*, or to give it its Western moniker, *Kung-Fu Master*, released in 1984. Despite its homage to *Game Of Death* and in-game references to several other Lee movies, the Japanese release was actually licensed from a Jackie Chan movie, *Wheels On Meals*. Indeed, it's an intriguing hotchpotch of martial-arts influences, with a lone combatant, Thomas, infiltrating a five-storey temple in order to rescue his missus, Sylvia, named after a character from the Jackie Chan flick. Viewed from a strict 2D side-view, it's also notoriously difficult, as Thomas encounters wave after wave of purple-clad henchmen, acrobatic dwarves, falling Ming vases and the rock-hard boss characters of each stage. But *Kung-Fu Master* laid down the elements of the scrolling fighting games to come – the daring rescue of a female in distress, the identikit parade of thugs in same-coloured costumes, end-of-level guardians and

KNOW YOUR BEAT-'EM-UPS

PUSH-SCROLLING
■ Most beat-'em-ups have backgrounds that scroll as your character walks and 'pushes' the screen, rather than the fixed movement of shoot-'em-ups or gun games.

PICK-UP
■ An object that aids your character – usually either a weapon or food that restores the player's health. Often dropped by enemies or concealed in crates or barrels.

COMBO
■ A set of attacking moves performed in sequence. These first appeared in *Renegade*, where your initial blows staggered enemies, allowing them to be finished off easily.

SPECIAL
■ A powerful attack, which can usually be triggered by initiating a certain combo or control sequence, such as pressing the attack and jump buttons together in *Final Fight*.

BRAWLER
■ Generally beat-'em-ups involve characters engaging oncoming foes in hand-to-hand combat, dispatching them with combinations of punches, kicks, grapples or throws.

HACK & SLASH
■ A sub-genre of beat-'em-up, typified by the *Golden Axe* series, featuring characters permanently armed with edged weapons, rather than picking them up occasionally.

SUB-BOSS
■ Bosses that are weaker than the main end-of-level guardians. In most Capcom games they are indicated by having much larger health bars than normal foes.

MULTI-ROUTE GAME
■ Some beat-'em-ups, such as *Dungeons & Dragons* and *The Revenge Of Death Adder*, included multiple routes, giving players a choice of paths.





» [C64] *Karateka* featured standout graphics and animation for its time.



» [Spectrum] With its extravagant parallax scrolling, Gremlin's *Way Of The Tiger* felt more like a pretty tech demo than a game.



» [Arcade] *Renegade's* forced pseudo-3D perspective allowed players to circumnavigate their attackers.

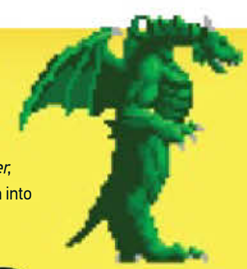
the all-important punching, kicking and jumping move-set.

The same year, across the Atlantic, software publisher Brøderbund released *Kareteka*, the first game by a young designer called Jordan Mechner. Like *Kung-Fu Master* it had cinematic origins, although with its feudal Japanese setting it owed more to Kurosawa than Hong Kong action films. Originally written for the Apple II, Mechner's game was notable for its movie-like cut-scenes (with screen-wipes influenced by *Seven Samurai*) and fluid animation, achieved by tracing filmed frames of a local karate instructor. *Karateka* had another damsel-in-distress plot, with its unnamed hero infiltrating the mountain stronghold of warlord Akuma to rescue a royal princess. However it differed from *Kung-Fu Master* in that the scrolling portion of the game was merely a transition to a series of one-on-one encounters, with combat being a more tactical affair requiring deftly timed counter-attacks rather than brute force. Despite its ambition and groundbreaking presentation, *Kareteka* was surprisingly nearly rejected by its publisher. "I originally turned it [down] because it didn't seem to have much gameplay," says Brøderbund co-founder Doug Carlston. "I had not yet sent the rejection letter when it turned out that we had an empty computer monitor at the Chicago CES and we needed something to put in there. Since *Karateka* was pretty we used it. Naturally that was the monitor everyone gravitated toward, so we signed Jordan up." While *Kareteka* wasn't as influential as *Kung-Fu Master* on future scrolling fighters, the technical advances made by Jordan in the game – particularly its rotoscoped animation – would become key elements of his double million-selling hit *Prince Of Persia*. Melbourne House's *Fist II*, the sequel to its well-regarded fighting game *Way Of The Exploding Fist*, was equally ambitious, with players wandering around an enormous scrolling jungle collecting scrolls and fighting enemies. Unfortunately the game's balance seemed to be weighed a bit too far towards walking rather than combat, and the C64 version was noticeably buggy. Another early home computer release, Gremlin's *Way Of The Tiger*, featured what the company dubbed 'triple scroll' parallax fighting sections, although again with single enemies at a time.

The game that heralded the arrival of the beat-'em-up as we know it was Technos' *Nekketsu K Ha Kunio-kun*, better known in the West by its localised version, *Renegade*. Arriving in arcades in 1986, its Japanese title roughly translates as 'hot-blooded tough-guy Kunio'. In the Japanese release Kunio is a high-school student who decides to take on a bunch of bullies who've been picking on his friend Hiroshi. *Renegade* changed this premise to a vigilante hero, or Mr K as he's known in the NES version, getting his girlfriend kidnapped by a vicious street gang. Technos moved the location of the game to a grittier, urban environment, one that would become a stock feature of many later beat-'em-ups. With its subway train-stations, parking lots and dimly lit alleyways, it played like the videogame equivalent of cult Seventies gang-themed movie *The Warriors* (which itself was turned into a successful scrolling fighter many years later by Rockstar Games). Unlike later games of its type, the control system was unusual in using separate buttons to attack to the left or right, but its most significant advance over *Kung-Fu Master* was the ability to move your character in four directions, with the game employing a forced angled perspective. It was also the first arcade beat-'em-up to include grappling

SELECTED TIMELINE





1984 – KUNG-FU MASTER
■ The earliest arcade game to feature a lone fighter taking on hordes of enemies and end-of-level bosses in a side-scrolling environment.

1985 – RENEGADE
■ Introduced an angled, semi-isometric viewpoint as well as four-way directional control, along with a primitive combo system.

1986 – DOUBLE DRAGON
■ The first arcade beat-'em-up to include cooperative two-player action, with players controlling fighting buddies Jimmy and Billy Lee.

1986 – RIVER CITY RANSOM
■ A sandbox beat-'em-up where players could team up and explore a town, level-up their characters and cause GBH to deformed foes.

1987 – ALTERED BEAST
■ Similar in gameplay to *Kung-Fu Master*, but with characters that could transform into powerful creatures and wreak havoc.

1988 – GOLDEN AXE
■ The first really popular weapons-based arcade beat-'em-up, adding magic spells which could be used to help with tougher enemies.

1989 – TEENAGE MUTANT NINJA TURTLES
■ One of the first licensed beat-'em-ups, which was also available as a deluxe cabinet.

FIVE ESSENTIAL GAMES

Want to play some of the best brawlers around? Here are some of our favourites…



FINAL FIGHT
■ 1989
■ ARCADE

The quintessential arcade brawler, *Final Fight* is the place to start for beat-'em-up newcomers. With characters nearly twice the size of those in *Double Dragon*, its rumbles through city streets and that famous subway train showdown still impress. Get it on the *Final Fight: Double Impact* compilation, which also includes the fantasy platformer *Magic Sword*.



THE SIMPSONS
■ 1991 ■ ARCADE

A beat-'em-up for all the family? With *The Simpsons*, Konami captured the offbeat feel of the TV show brilliantly, including familiar characters, soundbites from the cast, and locations like Krustyland, Moe's Tavern and Springfield Nuclear Power Plant. It's also a game that greatly rewards cooperative play, with its comical team-attacks providing a constant source of amusement.



STREETS OF RAGE 2
■ 1991 ■ MEGA DRIVE

Sega's super-slick crime-busting saga triumphed over all opposition on the consoles. Blaze, Max, Skate and Axel's antics bettered even *Final Fight*'s polished combat system, having a greater variety of attacking moves, specials and combos. It's currently available as part of Sega's digital Vintage Collection series, in a package that includes all three *Streets Of Rage* titles.



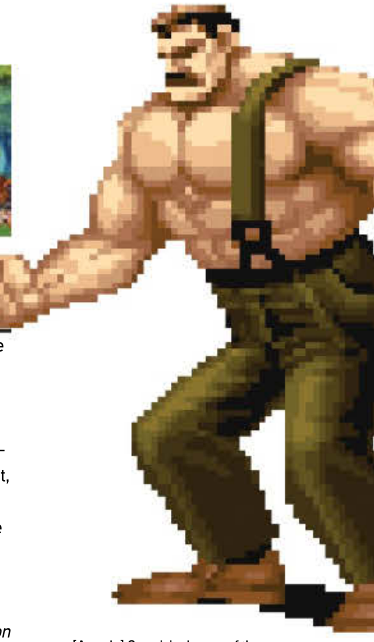
DUNGEONS & DRAGONS: SHADOW OVER MYSTARA
■ 1996 ■ ARCADE

Recently re-released in the *Chronicles Of Mystara* anthology along with predecessor *Tower Of Doom*, *Shadow Over Mystara* is one of the richest and most rewarding games of its type. With beautiful graphics and cleverly integrated role-playing elements, a particular highlight is its varied attacks.



GUARDIAN HEROES
■ 1996 ■ SATURN

Treasure's cult fighter was one of the Saturn's hidden gems and is easy to revisit due to its reappearance on Xbox Live Arcade. It's an epic mix of role-playing and fast-paced combat, with an undead monster you can command to decimate the enemy. Our favourite feature though is the ninja bunny-rabbit that lays into bad guys like the one from *Monty Python And The Holy Grail*…





» [Arcade] Surprisingly, one of the first things to greet you in *Double Dragon* was a lady's bottom.

> "It was a pretty good game. I think it was the first million-seller I worked on"
> Ste Pickford

and throws, standard enemies that took several hits before biting the pavement and foes that dropped their weapons when downed, although you couldn't use them yourself. But the game's designer Yoshihisa Kishimoto had noticed this, and for his next game he'd make sure you could.

Released in 1987, *Double Dragon* was a considerable improvement over *Renegade*, the most important addition being that, as its title suggested, you could now team up with a buddy and take on gangs of bikers, whip-toting female assailants and muscle-bound bosses together. Inspired by Kishimoto's love of pulp classics like *Enter The Dragon* and *Mad Max*, the game took place in an oppressive cityscape incorporating platform and climbing mechanics, with ladders and conveyer belts through industrial complexes and downtown slums, before moving into jungles and the castle stronghold of the Black Warriors gang. Instead of *Rengegade*'s slightly aimless scrolling arenas, players now had a goal to reach the far-right of each stage, accompanied by soon-to-be familiar flashing arrows. Weapon-carrying opponents could be divested of their hardware – baseball bats, knives and dynamite – and be picked up and used by the player, along the odd throwable crate or barrel. In fact the only aspect that hadn't been given a facelift was the game's storyline, which involved rescuing mutual sweetheart Marion, presumably whom protagonists Jimmy and Billy Lee ended up fighting over among themselves at the end. ▶







1990

FINAL FIGHT
■ The forerunner to the more advanced beat-'em-ups of the Nineties, with larger player-characters each with a specific set of moves.

DYNASTY WARS
■ Set in Three Kingdoms period China, this Capcom release was unique in being based around horse-mounted combat.

1991

BATTLETOADS
■ Released on the NES, Rare's alternative to the *Turtles* craze featured exaggerated special moves and vehicle-based platform sections.

THE SIMPSONS
■ Another great licensed Konami scrolling fighter, *The Simpsons* was notable for its team-up attacks when played in co-op mode.

1992

STREETS OF RAGE 2
■ Sega's Mega Drive brawler added more characters, special moves and varied locations to the mix, significantly bettering the original.

1993

ALIEN VS PREDATOR
■ The second arcade beat-'em-up to utilise Capcom's powerful CPS-2 system board following *Dungeons & Dragons: Tower Of Doom*.

1994

1995





» [C64] *The Battles Of Usagi Yojimbo* was a thoughtful beat-'em-up adventure starring a samurai rabbit.

Double Dragon was a massive commercial success for Technos and kicked off an explosion in arcade scrolling beat-'em-ups, as other Japanese coin-op manufacturers cashed-in on the co-op brawling craze. Capcom, which had dabbled in the genre with its 1986 weapon-based fighter *Trojan*, went back to the ancient oriental theme with *Tiger Road*. The game sported exquisite graphics for its time, featuring fights through pagodas, temples and dojos. Data East's 1988 arcade game *Bad Dudes Vs DragonNinja* replaced the street thugs and biker gangs of rival games with hordes of rampaging ninjas, who were a step above other bad guys in kidnapping the President of the United States rather than the player's girlfriend. Sega got in on the act with *Dynamite Dux*, a bizarre scrolling fighter with two feathered heroes beating up sausage dogs, sumo pigs and roller-skating cats, with help from a stock of high explosives. Irem released *Vigilante*, a spiritual follow-up to *Kung-Fu Master*, starring a nunchaku-wielding crime-fighter, although the action was strictly 2D and single-player only. Namco launched its gory *Splatterhouse* series with an inaugural arcade beat-'em-up featuring a character that looked exactly like Jason from *Friday The 13th*. And continuing the ninja theme, *Shadow Warriors*, the first outing for the somersaulting assassin of Tecmo's *Ninja Gaiden* franchise, also appeared in arcades. It's notable for its bonkers plot involving a nefarious cult led by a descendant of Nostradamus, who's seeking to fulfill his prophecies of Armageddon itself – another level of badass-ness entirely from kidnapping women or holding heads of state for ransom.

In the UK, movie licence mogul Ocean Software released a tie-in based on Stallone's *Cobra*, a surprisingly off-the-wall platform beat-'em-up-cum-shooter with a sunglassed Sly head-butting bad guys and snacking on burgers while inexplicable hurtling prams flew whistled past him. Ocean also secured the rights to produce home versions of the Renegade arcade game, following its port with an in-house developed sequel, *Target Renegade*, of which the highlight was jump-kicking bad dudes off motorbikes. The deal with Technos extended to the home conversions of *Double Dragon* and a third *Renegade* sequel, *The Final Chapter*, which added an unlikely time-travelling plot and the opportunity to punch mummies and dinosaurs in the chops. Melbourne House made up for the disappointment of *Fist II* with *Samurai Warrior: The Battles Of Usagi Yojimbo*, a side-scrolling combat adventure based around Stan Sakai's *Usagi Yojimbo* comic book series. Set in the Japanese Edo period and starring a samurai sword-wielding rabbit, it offered a surprising amount of depth for a fighting game, with multiple pathways and a unique karma system where killing innocent characters would come back to haunt you later on.



» [Arcade] *Altered Beast*'s 2D gameplay was a throwback to games like *Kung-Fu Master*.



» [NES] Opening a can of whup-ass in *Battletoads*.

Back in the arcade, Technos countered the copycats with sequel *Double Dragon II: The Revenge*, which didn't add a lot that wasn't in the original bar a few added moves and… cows. It also reverted back to *Renegade*'s directional attack buttons rather than having separate ones for punching and kicking, and cruelly killed off love interest Marion at the start of the game, giving rise to its title, as Jimmy and Billy Lee returned to dish out their own brand of karmic justice. But it was the third game in its *Kunio-kun* series that made a big splash for the company in the home console market, as well as being its most progressive beat-'em-up yet. Released for the Western market as *River City Ransom*, it added open-world and role-playing elements to create a cohesive beat-'em-up adventure, in which super-deformed characters Alex and Ryan battled to rid the streets of student gangs. Like *Double Dragon* it included the ability to grab objects such as knuckle-dusters, trashcans and even other enemies to use as offensive weapons, while defeated baddies dropped coins that could be spent on sushi and doughnuts to increase your combat stats. While graphically simplistic the anime-style visuals had a lot of charm, and as a co-op experience it was one of the most enjoyable releases of the era for the NES.

Alongside *River City Ransom*, 1989 was an important year for side-scrolling beat-'em-ups with two immensely popular arcade titles entering the fray. Sega brought the world of fantasy epics like *Conan The Barbarian* to life in *Golden Axe*, a weapon-based fighter with some of the best-looking graphics of its day. It was the brainchild of Sega designer Makoto Uchida, whose previous game, *Altered Beast*, had been a sort of mythological

D&D: SHADOW OVER MYSTARA
■ One of the last Capcom scrolling fighters to appear in arcades, this ambitious release featured a huge inventory of weapons, potions and magic.



THE WARRIORS
■ A surprisingly enjoyable 3D fighter based on the popular 1979 movie.



1996 · 1997 · 1998 · 1999 · 2000 · 2001 · 2002 · 2003 · 2004 · 2005 · 2006 · 2007 · 2008

DYNASTY WARRIORS 2
■ One of the best early examples of a 3D scrolling beat-'em-up. It's become a huge success for Omega Force, spawning many sequels.



CASTLE CRASHERS
■ A medieval-themed brawler with role-playing overtones, the success of which showed developers that beat-'em-ups still held wide market appeal.

WHAT MAKES A GREAT BEAT-'EM-UP

Discover the elements that make for a brilliant brawler



EPIC BOSS FIGHTS

■ The hulking Death Adder in *Golden Axe*, the giant Krusty balloon in *The Simpsons*, and the huge Red Dragon of *Tower Of Doom* are all great examples of memorable bosses.

VARIED PLAYABLE CHARACTERS

■ Musclebound tank or nimble female warrior? Having a decent roster of playable characters with varied abilities and moves is a great way to increase the longevity of a brawler.

EXOTIC LOCATIONS

■ If you're tired of Metro City, it's great to head into space with *Battletoads* or *Bucky O' Hare*, visit ancient China in *Dynasty Wars*, or embrace high fantasy in *Dungeons & Dragons*.

ENEMY ONSLAUGHT

■ The action never lets up in a good beat-'em-up, as you're faced with an endless stream of poorly trained assailants to smack about the head and generally make mincemeat of.

SPECIAL MOVES

■ From back-flip combos and Mike Haggar's suplex ground-smash to calling in a rocket launcher-equipped cop car in *Streets Of Rage*, specials are always good fun to use on hapless foes.

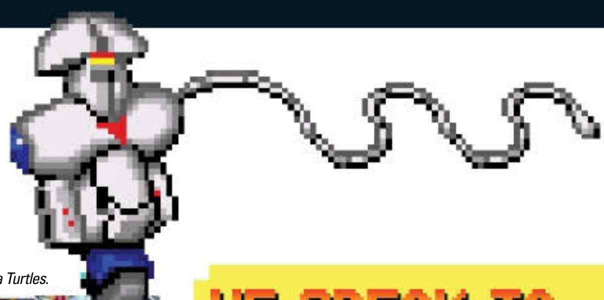


» [Arcade] The utterly mystifying *Michael Jackson's Moonwalker*. Let's just blame it on the boogie…



» [Arcade] Fighting on some giant mushrooms in *Golden Axe* sequel *The Revenge Of Death Adder*.





» [Arcade] Battling Shredder in *Teenage Mutant Ninja Turtles*.



▶ *Kung-Fu Master* with a beast-transforming plot-twist pinched from *Manimal*. *Golden Axe* was one of the first games of its type to introduce a female playable character, Tyris Flame, alongside a Conan-style barbarian called Ax Battler and a dwarf, Gilius Thunderhead. It also offered nifty features like screen-clearing magic spells and the ability to hop on the back of creatures and use their attacks to take down the medieval hoodlums. The game which for many defines late-Eighties beat-'em-ups arrived shortly after – Capcom's *Final Fight*. Developed under the working title *Street Fighter '89*, it refined the two-player model set down by *Double Dragon*, with larger characters reminiscent of those seen later in *Street Fighter II* and an emphasis on powerful weapon pick-ups and grappling and throwing moves. *Final Fight* introduced us to sparring-partners Cody and Guy, and Hulk-like Mayor Mike Haggar, who seems to have taken his pledge to clean up his neighbourhood, Metro City, a little too seriously after his daughter is kidnapped by the Mad Gear Gang. It featured many elements that would become a standard feature of a multitude of future Capcom beat-'em-ups like snacking on food items for extra health and energy gauges for each enemy on-screen. And as a last ditch resort, pressing the attack and jump buttons together pulled off a special move, which drained a small amount of the player's health, but was effective at clearing away surrounding enemies. It was also memorable for a bonus intermission sequence in which Haggar and co took to smashing the bejesus out of parked cars, for no apparent reason whatsoever.

Another big arcade success that year was Konami's *Teenage Mutant Ninja Turtles*. Based on the TV cartoon series rather than the live-action movie, Konami released both a two-player version and a deluxe cabinet where up to four players could take control of Donatello, Michelangelo, Leonardo and Raphael. The plot revolved around the Turtles rescuing their journalist buddy April O'Neil from the clutches of their eternal foe, Shredder. This game was later ported to the NES as *Teenage Mutant Ninja Turtles II: The Arcade Game* to distinguish it from another *TMNT* title already released on the console. The global craze for the half-shelled heroes led to an even better arcade sequel, *Turtles In Time*, in 1992 and a third beat-'em-up, *Turtles III: The Manhattan Project*, for the NES. Developer Rare was obviously impressed, creating a rival set of anthropomorphic amphibians for its *Battletoads* franchise, which took the reverse route of going from videogame to a

WE SPEAK TO... Daniel Crenna, producer – River City Ransom: Underground



What was it about the original *River City Ransom* that made you want to develop the first proper sequel, 25 years on?
The open sandbox, the feeling that the game was ahead of its time… it was the most fun my brother, sister and I ever had playing a videogame together. We collaborated on earning money for upgrades and maxing out our stays. It wasn't the storyline that mattered; it was what you made up in your head to go along with it. It also had one of the catchiest soundtracks of any game.

Was it hard to get the official licence from Technos at all?
Technos Japan Ltd is no more, but ex-employees revived the company as Million Co Ltd. We did have to demonstrate our seriousness and our genuine concern for making a game that would stand alongside the originals. It took a long time and we had quite a few rounds of Q&A, negotiation and concept art before we were given the go-ahead.

How will you be utilising modern technology in a game that essentially has the classic looks and feel of an 8-bit title?
We're not going to be limited too much by the number of active enemies on-screen, we can have so much more memory to play with in terms of textures so our world can be much larger. The general philosophy is to just to have more of everything. We get a lot of headroom because we aren't using a lot of advanced techniques, on purpose.

Will you be taking inspiration from any other 'classic' scrolling fighting games apart from the original *RCR*?
Absolutely. We have influences from *Double Dragon*, *Street Fighter*, *The Combatribes* and *Alien Vs Predator*, to name a few.



What do you think makes the perfect scrolling fighter and will *River City Ransom: Underground* come close to being that?
I hope so. A scroller has to satisfy the need for immediate satisfaction and not force you to grind. Even the original had some challenges that way. Our biggest challenge is the vast amount of content on top of the combat sandbox. We will do everything we can to get as much game in as possible. We'll see if we can do that all at once or release early and often until we have the game we're happiest with.

"A scroller has to satisfy the need for immediate satisfaction and not force you to grind"
Daniel Crenna

kids cartoon. The series even spawned one of the strangest beat-'em-up crossovers, *Battletoads & Double Dragon: The Ultimate Team*, with Billy and Jimmy Lee fighting arch-villainess The Dark Queen alongside Rare's reptilian trio.

One of the strangest beat-'em-up licenses of all time arrived in 1990, in the guise of Sega's *Moonwalker*, a Michael Jackson tie-in based on his 1988 film. This saw a white-suited Jacko, complete with tilted fedora, rescuing kidnapped children and flooring enemies with the power of dance. Occasionally his pet chimp Bubbles would show up, and picking him up would initiate a transformation into a laser-spitting robot… naturally. Seemingly to prove that Sega hadn't completely lost the plot, that year also saw the debut of its most enduring beat-'em-up series, as Adam, Axel and Blaze debuted in *Streets Of Rage* on the Mega Drive. Although heavily influenced by *Final Fight*, it was a polished title with plenty of smart touches, such as its trio of specially trained ex-cops calling in assistance in the form of police car power-ups and rocket-launcher smart-bombs. It was also probably the closest experience to playing *Final Fight* that home gamers could have at the time, at least until the Mega-CD



» [Arcade] A spot of bother at the subway station in *Final Fight*.

version of Capcom's hit arrived. But it was the follow-up, *Streets Of Rage 2*, released two years later, that really sent the series into overdrive. The first thing you noticed when booting up the cartridge was the stunning title music by acclaimed composer Yuzo Koshiro. On playing it was clear that Sega had completely rebuilt the game engine, as was evidenced by the larger player-characters and vastly improved graphics and animation. The original's arch baddie Mr X was back again, wreaking havoc on the streets of the game's unnamed metropolis, but the action was faster, slicker and better-paced all round. Two new playable characters were added, Adam's kid brother Skate and snazzily-named wrestler Max Thunder. Best of all, each character now had a very different feel, with unique movesets and new specials, 'fury' and 'blitz' attacks, such as Axel's dragon smash and Skate's dynamite head-butt. *Streets Of Rage 2* was a massive game, with locations ranging from an amusement park to a pirate ship, and Mr X's vast *Bond*-style underground hideout. Surpassing even *Final Fight* in scope and depth, it became the benchmark console brawler that rival publishers would struggle to beat. Indeed, Sega itself failed to match its playability in the final game of the series, *Streets Of Rage 3*. One of the last Mega Drive releases, it suffered from being way too difficult, throwing enemies with massive health bars at the player that took way too long to defeat.

The early Nineties arcade scene was dominated by two Japanese companies, Capcom and Konami. With its influence becoming apparent in games such as Irem's *Undercover Cops*, Data East's *Two Crude Dudes* and Technos' *The Combatribes*, Capcom continued to release a steady stream of scrolling fighters on *Final Fight*'s CPS-1 system hardware. *The Punisher* was a slick Marvel comic book tie-in that played like *Final Fight* on steroids and included the option to play as the title character or SHIELD agent Nick Fury. Another comic licence, *Cadillacs And Dinosaurs*, mixed a



DID YOU KNOW?

1 **The first scrolling beat-'em-up, *Kung-Fu Master*, was developed by Irem, the Japanese company that later became famous for the *R-Type* shoot-'em-up series. It was produced by Takashi Nishiyama who also created the 1982 arcade-hit *Moon Patrol*.**

2 **Technos, the company that formulated the modern beat-'em-up with *Renegade* and *Double Dragon*, was founded in 1981 by three Data East ex-employees. One of its early hits was the pioneering one-on-one fighting game *Karate Champ*.**

3 **Capcom's *Final Fight* was ported to many home formats, including a very fine Sega Mega-CD conversion, and received two sequels exclusively on the SNES. The total sales of the *Final Fight* series have so far totalled 3.4 million units. Just ignore the awful 3D sequel.**

4 **The car-smashing bonus interludes first seen in *Final Fight* later showed up in *Street Fighter II*. The design team also had other ideas that didn't quite make it into Capcom's brawler, including karate-chopping pianos and demolishing a house.**

5 ***Golden Axe*-creator Makoto Uchida took inspiration for the visual design of his game from watching a VHS copy of *Conan The Barbarian*. He was also heavily influenced by *Lord Of The Rings*, and admits on page 20 to being a bit of a Gandalf fanboy…**

6 **The *Streets Of Rage* series was published exclusively for the Sega Mega Drive, and its most accomplished instalment, *Streets Of Rage 2*, was a contributing factor in getting many gamers to purchase the console over its rival the SNES.**

7 **The Capcom CPS hardware that powered its arcade beat-'em-ups was much advanced over most of its rivals. Games like *Alien Vs Predator*, *Dungeons & Dragons: Shadows Over Mystara* and *Armoured Warriors* used the CPS-2 board that allowed incredibly detailed 2D graphics and animation.**

8 ***Castle Crashers*, the popular side-scrolling beat-'em-up released on Xbox Live Arcade in 2008, has sold over 2.6 million copies on Microsoft's console. Developer Behemoth cites *River City Ransom*, *Guardian Heroes*, *Final Fight* and *Double Dragon* as being major inspirations.**

9 ***Double Dragon* creator Yoshihisa Kishimoto teamed up California-based studio Wayforward Technologies to celebrate the 25th anniversary of the game with the 2012 reboot *Double Dragon Neon*. It was the first time he'd been involved in a *Double Dragon* title since the early Nineties.**

10 **Canadian developer Conatus Creative raised over $200,000 CAD in a recent Kickstarter campaign from fans eager to play its officially-sanctioned sequel *River City Ransom: Underground*. Yoshihisa Kishimoto is also involved the project as an advisor.**



» [Arcade] Facing Magneto in *X-Men*.



» [Arcade] Konami's *Asterix* captured the look of the comic books perfectly.

Fifties setting with close encounters of the prehistoric kind. Both games had an increased emphasis on gunplay as well as fisticuffs, packing in an arsenal of weapons from lowly pistols to high-powered machine-guns and bazookas. The fantasy-themed *The King Of Dragons* was an enjoyable precursor to the company's later *Dungeons & Dragons* titles, while *Dynasty Wars* and Arthurian brawler *Knights Of The Round* added horseback-mounted combat. The wacky *Captain Commando* introduced a new Capcom mascot, a blue-suited crime-fighter with electric-shocking powers. The unlikely superhero headed a cast of characters whose members included a mummy-like alien and a baby in a giant walking robot suit.

Konami's most high-profile beat-'em-up of the era, alongside *Turtles In Time*, was its cartoon tie-in *The Simpsons*. Showcasing some wonderfully realised graphics, with characters looking like they'd just walked off the TV show, it featured a rampaging Homer, backed up by Marge, Bart and Lisa, battling through Springfield to save baby Maggie from Mr Burns and cohort Smithers. As with the *TMNT* games it allowed up to four players to join in the action and even team up to execute powerful special moves. Bart and Lisa could hold hands and run full-tilt at adversaries, toppling them like bowling-pins, or both could hitch a piggyback ride on Homer and clobber them from above. Marge could pick up her kids and throw them, and she and her hubby also had a bizarre rolling cartwheel attack together. Animated interludes and balloon-inflating mini-games rounded off a very accomplished coin-op experience. The company also produced a licensed *X-Men* brawler, releasing a deluxe cabinet version that incorporated two monitors and room for up to six players. Other Konami scrolling fighters included *Bucky O'Hare*, ▶

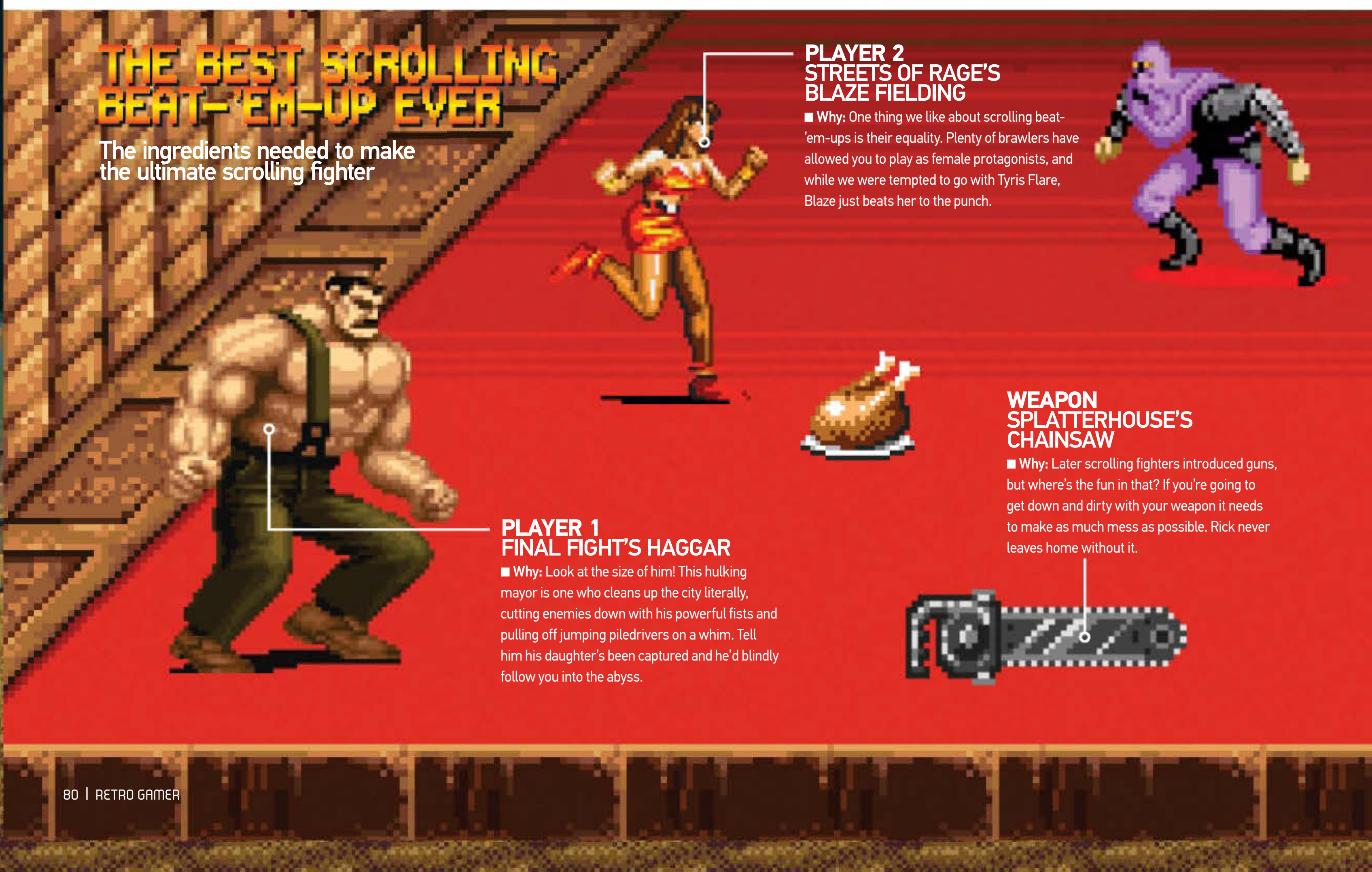


» [Arcade] *Battle Circuit* was Capcom's last arcade scrolling beat-'em-up and featured nutty characters and insane bosses.

based on the comic book adventures of a space-faring bunny, and *Asterix*, in which the pint-sized Gaul popped magic strength potions and scattered Roman centurions over the countryside, accompanied by his wild boar-obsessed buddy Obelix.

Capcom was granted the rights to produce an *X-Men* scrolling fighter on the SNES, *Mutant Apocalypse*, while other licensed superheroes cropped up in Blizzard's console title *The Death And Return Of Superman* and Sega's arcade brawler *Spider-Man: The Videogame*. When Acclaim won the rights to publish console titles based on the *Spider-Man* licence from Sega, the task of developing the first two releases went to Software Creations, coming to the attention of coder and artist John and Ste Pickford. "Both of us loved *Final Fight*," says Ste, "and we'd often complain that superhero games always ended up being adapted to genres that didn't suit them, like the standard Ocean Software licensed game template of platform game with driving sections. As an artist who liked comics, I loved the black outlines and flat colours of the American superhero comics I'd grown up with, and was itching to make a game that looked like that. So, we pitched the idea of making *Spider-Man/X-Men: Arcade's Revenge* into a *Final Fight*-style beat-'em-up, with big characters, flat colours and strong black outlines." But it wasn't until the second game, *Spider-Man And Venom: Maximum Carnage* that the pair's idea was fully realised. "It was a pretty good game," reflects Ste. "I think it was the first million-seller I worked on."

The final round of classic scrolling fighting games came in the mid-Nineties, with Capcom's *Alien Vs Predator* and its two superb *Dungeons & Dragons* titles, along with Sega's *Golden Axe* sequel *The Revenge Of Death Adder*. *Alien Vs Predator* saw human-cyborg fighters teaming up with Predator warriors to prevent a full-scale Alien invasion of Earth, en-route to a showdown with a towering Alien Queen. The two *Dungeons & Dragons* games *Tower Of Doom* and *Shadow Over Mystara*, mixed role-playing elements and spectacular spell-casting effects with traditional side-scrolling combat, and featured a huge amount of depth for arcade titles, particularly *Mystara*. Capcom eventually bowed out of the genre in arcade with the delightfully barmy *Battle Circuit*, which featured pink ostriches and jetpack-wearing Mandrills. Treasure's *Guardian Heroes*, a combat action-adventure for the Sega Saturn, was similarly ambitious, including an epic branching storyline and a staggering amount of moves for each of its playable characters. However, the advent of 3D graphics, and an influx of coin-op racing games and lightgun shooters soon saw a decline in the genre's popularity. Developers seemed unsure of what to do with the larger open areas that 3D offered and as a result most examples of the genre during this time suffered heavily, with dull environments, not enough enemies and clunkier controls. *Fighting Force* promised much, but ultimately failed to deliver, while the less said about Capcom's *Final Fight Streetwise* the better.



THE BEST SCROLLING BEAT-'EM-UP EVER

The ingredients needed to make the ultimate scrolling fighter

PLAYER 2
STREETS OF RAGE'S BLAZE FIELDING

■ **Why:** One thing we like about scrolling beat-'em-ups is their equality. Plenty of brawlers have allowed you to play as female protagonists, and while we were tempted to go with Tyris Flare, Blaze just beats her to the punch.

PLAYER 1
FINAL FIGHT'S HAGGAR

■ **Why:** Look at the size of him! This hulking mayor is one who cleans up the city literally, cutting enemies down with his powerful fists and pulling off jumping piledrivers on a whim. Tell him his daughter's been captured and he'd blindly follow you into the abyss.

WEAPON
SPLATTERHOUSE'S CHAINSAW

■ **Why:** Later scrolling fighters introduced guns, but where's the fun in that? If you're going to get down and dirty with your weapon it needs to make as much mess as possible. Rick never leaves home without it.



You'd get the odd enjoyable gem such as *Die Hard Arcade* and *SpikeOut*, but the genre was definitely in decline. Developer Omega Force has largely kept the genre alive thanks to franchises such as *Dynasty Warriors*, *Samurai Warriors* and *Warriors Orochi*, which apply strategy and historical battles to the original beat-'em-up DNA that was so popular in arcades. And then of course you have the likes of *Devil May Cry*, *Bayonetta*, *God Hand* and others; although these admittedly stray far further from the arcade fighters we're mainly concerned with here. Ultimately, one of the best examples we can think of is in recent times is Capcom's *Viewtiful Joe* series, which kept the action strictly 2D but delivered neat new mechanics, like slow-mo and zoom-in, which suddenly reinvigorated the genre (although sadly not long enough to keep the series alive today.

While 3D largely killed the genre for many, a recent resurgence of games harking back to classic 8-bit brawlers like *Scott Pilgrim Vs the World*, *Castle Crashers* and *Retro City Rampage* have plugged a gap in the market for those yearning for old-fashioned beat-'em-up thrills, along with re-releases of the *Golden Axe* and *Streets Of Rage* trilogies, and reboots of *Karateka* and *Double Dragon*. Projects such as the Kickstarter-funded *River City Ransom: Underground* also aim to revive long-lost cult brawling franchises. Canadian game studio Conatus Creative is currently working on an official sequel, 25 years after the original game, with the blessing of ex-Technos staff including *Double Dragon* creator Yoshihisa Kishimoto. It seems we've still not thrashed the life out of the side-scrolling beat-'em-up yet, and there may well be plenty more to come. ✱



» [GameCube] After the terrible *Final Fight: Streetwise*, Capcom redeemed itself with *Viewtiful Joe*.



» [Arcade] *The Knights Of Valour* series was heavily influenced by Capcom's arcade brawlers.



» [Xbox 360] *Double Dragon Neon* rebooted the franchise 25 years after the original.



FOOD
STREETS OF RAGE'S WHOLE TURKEY

■ Every fighter needs to regain health, so what better way than guzzling down a roast turkey? Edible all year round.

FODDER
TEENAGE MUTANT NINJA TURTLES' FOOT SOLDIERS

■ **Why:** Versatility is the name of this cheap piece of cannon fodder. He has access to an array of exotic weaponry, boasts an expansive wardrobe and loves fighting en-masse. He's the perfect solution to all your minion needs.

LEVEL
DOUBLE DRAGON'S FINAL STAGE

■ **Why:** Because it's one of the most iconic looking beat-'em-up levels around, resplendent with its lush red carpet and ornate stonework. Seeing your girlfriend helplessly trussed up is also a great motivator.

BOSS
BATTLE CIRCUIT'S DOC & JENNIFER

■ **Why:** Most scrolling fighters typically feature human foes as their bosses, so when you encounter a jetpack-wearing mandrill who carries around a human female companion you tend to remember them.

Future Classic

Modern games you'll still be playing in years to come



INFO

- » **Featured System:** PlayStation 3
- » **Year:** 2013
- » **Publisher:** Sony
- » **Developer:** Naughty Dog
- » **Key People:** Neil Druckmann (writer, director), Bruce Straley (director), Gustavo Santaolalla (composer), Jacob Minkoff (Designer)

GO DEEPER

- » ***The Last Of Us*** **was the second best-selling game of 2013, losing out to *Grand Theft Auto V*.**
- » **The 'Balance Of Power' AI system sees enemies reacting to Joel and Ellie's on-screen actions.**



» [PS3] You feel every last hit in *The Last Of Us*. It makes for a brutal experience.

40. THE LAST OF US

Critically acclaimed upon release, The Last Of Us rightly cemented Naughty Dog's position as developer of the generation. Darran Jones revisits its macabre masterpiece

THE BACKGROUND

We had a few concerns when *The Last Of Us* was first announced. It was the first time that Naughty Dog had created a second IP for a single generation of hardware and the first time it had split its staff to work on two separate games – one team on *The Last Of Us*, the other on *Uncharted 3: Drake's Deception*. Would the developer who had scored a direct hit with the adventures of Nathan Drake maintain that quality with a now divided team? We needn't have worried… When Sony publicly unveiled *The Last Of Us* at the 2011 Spike Video Game Awards it left little doubt that the talented first-party developer was once again on the verge of striking gaming gold.

While *The Last Of Us* features many of the tropes associated with apocalyptic videogames, Naughty Dog was keen to put its own spin on the formula. The fearsome enemies that feature throughout its running time aren't zombies, but humans who have been infected by a strain of the Cordyceps fungus, which typically prey on ants and other insects. It also strayed away from the barren game worlds of *Fallout* and *Wasteland*, creating a verdant paradise where nature had reclaimed a world once populated by man. In short it felt completely different to everything that came before it.

THE GAME

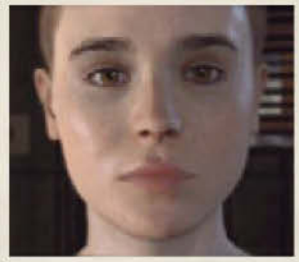
It's rather telling that when people discuss *The Last Of Us* its actual game mechanics – despite their refinement – are rarely discussed before its characters or story. It's not due to them being weak, but more to do with the fact that the characters and story that feature in Naughty Dog's game are incredibly well crafted. Unlike many other big budget releases, these are characters that you care about, with even the most fleeting characters feeling fully fleshed out.

Like the very best books and movies, you'll find yourself continually discussing the motives of characters; their place in the bleak world that Naughty

Things of note







Acting up

The script and mo-cap may be excellent, but it's the voice acting throughout that really impresses. Troy Baker and Ashley Johnson really breathe life into Joel and Ellie.

DLC adventures

Naughty Dog has just released a new piece of DLC entitled *Left Behind* that tells Ellie's story before she met up with Joel. It's pricey, but fans will lap it up.

No more please

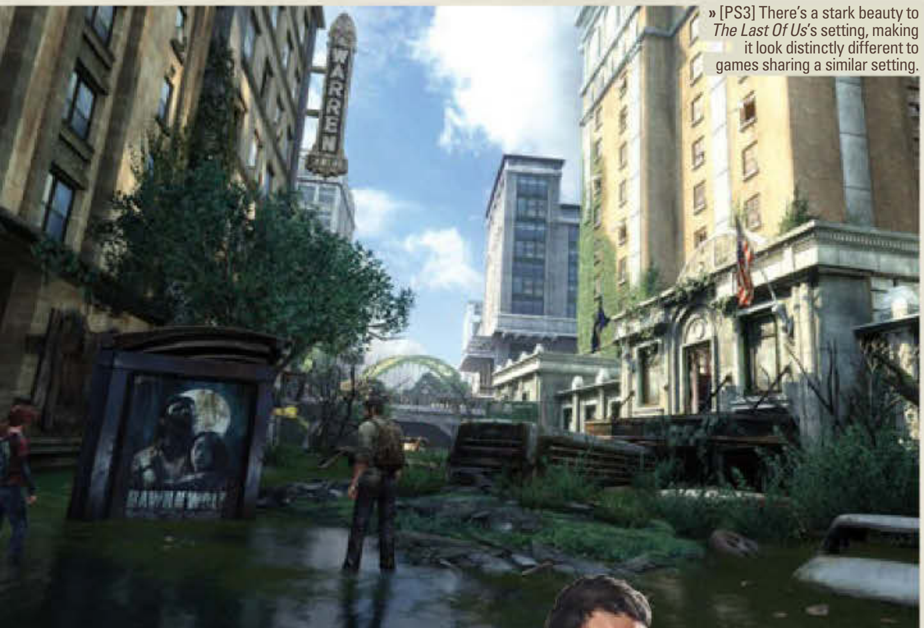
As far as we're concerned Joel and Ellie's story is finished. If you must return to *The Last Of Us* universe, Naughty Dog, do it with brand new characters please.

Multiplayer madness

The Last Of Us's multiplayer does a good job of capturing the brutality of the main game. While 'Supply Raid' is a deathmatch, 'Survivors' has you killing off every opponent.

You look familiar

When Ellie's character was first revealed she looked very similar to Juno star Ellen Page, who was quick to point out she was already involved with *Beyond: Two Souls*.



» [PS3] There's a stark beauty to *The Last Of Us*'s setting, making it look distinctly different to games sharing a similar setting.



» [PS3] There is a selection of enemies to contend with, from runners to deadly one-hit-and-you're-dead clickers.



» [PS3] *The Last Of Us* cleaned up at the BAFTAs winning five awards, including Best Game.

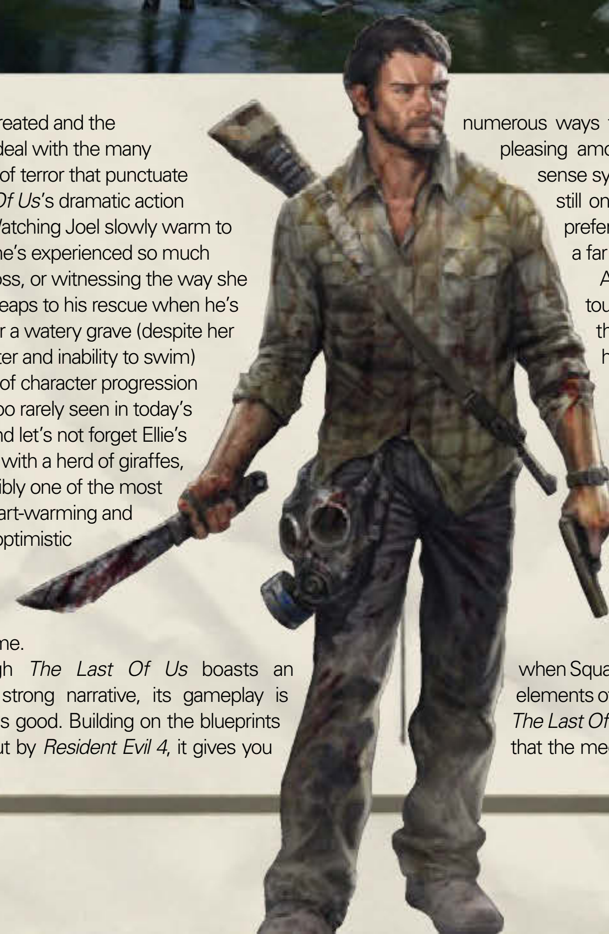
What the press thought



Play
Score: 94%
"When *The Last Of Us* is good (winter), it's better than anything else this gen – we do not say *that* lightly."



games™
Score: 9/10
"Like *BioShock Infinite*, this is something that will live long in the memory and even longer in discussion."



Dog has created and the way they deal with the many moments of terror that punctuate *The Last Of Us*'s dramatic action scenes. Watching Joel slowly warm to Ellie after he's experienced so much personal loss, or witnessing the way she fearlessly leaps to his rescue when he's heading for a watery grave (despite her fear of water and inability to swim) is the sort of character progression that is all too rarely seen in today's games. And let's not forget Ellie's encounter with a herd of giraffes, quite possibly one of the most bizarre, heart-warming and hopefully optimistic scenes to ever appear in a videogame.

Although *The Last Of Us* boasts an incredibly strong narrative, its gameplay is every bit as good. Building on the blueprints first laid out by *Resident Evil 4*, it gives you numerous ways to clear most sections, offering a pleasing amount of flexibility. The heightened sense system highlights the fact that you're still only playing a videogame, but most prefer to turn these options off, delivering a far stiffer challenge.

And *The Last Of Us* is certainly tough, both in its encounters and the brutality of Joel's action as he attempts to protect Ellie, who quickly becomes his surrogate daughter as Druckmann weaves his narrative thread.

While hand-to-hand combat largely consists of repeatedly hammering the Square button, there's surprising weight to each blow, making you wince at the carnage that gets unleashed by both Joel and his human and mutated aggressors. In a time when Square Enix was trumpeting the survival elements of its new *Tomb Raider* game, it was *The Last Of Us* that did it properly, making sure that the mechanics it introduced felt grounded in reality, rather than being simple buzzwords that didn't really make an impact in Crystal Dynamics' game. Take the way both development studios handle a near-fatal fall for its lead characters. One is up and running mere moments after it happens, the other leads to one of *The Last Of Us*'s strongest chapters. It goes back to Naughty Dog's understanding of how the passive world of cinema is best exploited by the more immediate nature of videogames and as a result *The Last Of Us* rarely puts a step wrong.

WHY IT'S A FUTURE CLASSIC

Few games put you through the emotional wringer like *The Last Of Us*. During its 15-odd hours, we laughed, cried and even punched the air in joy upon realising that a key character was still in the running – even the best triple-A releases don't elicit that range of emotions from us. Developers like Rockstar and Quantic Dreams may love movies, but it's Naughty Dog that truly understands how to weave an epic narrative between two vastly different mediums. If its *Uncharted* games were silly summer blockbusters, then *The Last Of Us* represents its bid for Oscar gold – nuanced, beautifully paced and leaving you discussing its ending long after it finishes. *



TOP 25 SEGA SATURN GAMES

The Saturn might have struggled at retail, but its software line-up was enviable. Nick Thorpe counts down top 25 games on Sega's black box, as voted for by Retro Gamer readers



Panzer Dragoon

■ **DEVELOPER:** TEAM ANDROMEDA
■ **YEAR:** 1995 ■ **GENRE:** SHOOT-'EM-UP

25 **Kicking off your** top 25 is one of the Saturn's earliest hits. This on-rails shooter expanded on the formula of games like *Space Harrier* by adding the ability to rotate the camera, allowing the player to tackle enemies from every direction. Upon its release in 1995, *Panzer Dragoon* was the most expensive game Sega had ever developed, a fact that shines through in the game's production values.

Sonic R

■ **DEVELOPER:** TRAVELLER'S TALES
■ **YEAR:** 1997 ■ **GENRE:** RACING

24 **The Saturn years** were Sonic's quiet spell, as the speedy critter took a back seat to Sonic Team's other projects, but he did still manage one classic release in this on-foot racing game. The game's key feature was its magnificently designed circuits – all five were packed with secrets and shortcuts and needed to be fully explored to progress, adding a touch of *Sonic*'s platforming heritage to the racing genre. It was also one of the Saturn's prettiest releases, with Traveller's Tales managing to squeeze some impressive transparency effects out of the hardware. It'll only take a day to unlock all of the secrets, but you'll have a great time doing so.





Soukyugurentai

■ **DEVELOPER:** RAIZING
■ **YEAR:** 1997 ■ **GENRE:** SHOOT-'EM-UP

23 **It's often been** said that a Saturn owner must be willing to import to get the most from their machine. *Soukyugurentai* is an uncompromisingly difficult shoot-'em-up built from scaling sprites rather than textured polygons, and a game makes for strong evidence to support that statement. The *RayForce*-inspired lock-on mechanics make for a fantastic game, but one which ran against the prevailing tastes of the Western market.



Shining Force III

■ **DEVELOPER:** CAMELOT SOFTWARE PLANNING
■ **YEAR RELEASED:** 1998 ■ **GENRE:** RPG

22 Just like its Mega Drive forebears, *Shining Force III* takes a place amongst the best RPGs on the Saturn. You play as the young lord Synbios, caught in a war between his native Aspinia and the Empire of Destonia, who needs to stop a mysterious sect that seeks to intensify the conflict. *Shining Force III*'s distinguishing feature is its fantastic battle system, which adds tactical elements such as positioning and range to the standard RPG combat formula.

As one of the Saturn's best late releases, *Shining Force III* is highly desirable in its English language incarnations, frequently selling for prices between £50 and £100. However, if you're able to read Japanese, you are in luck. Not only is the game cheaper, it's part of a trilogy – the translated game is *Shining Force III Scenario 1*, with the second and third parts following the stories of significant characters met in the first.

Die Hard Arcade

■ **DEVELOPER:** SEGA
■ **YEAR:** 1997 ■ **GENRE:** BEAT-'EM-UP

21 Sega's approach to licensing with this game certainly was interesting – it was originally released in Japan as *Dynamite Deka*, and featured a cop who looked a bit like Bruce Willis fighting his way through a terrorist-filled skyscraper. So for the Western release, Sega picked up the *Die Hard* licence and called it a day. That would have been fine, but we don't remember Hans Gruber being bald or kidnapping the President's daughter, nor the bit where John McClane fights four-legged robots.

While it might not have been the closest film adaptation ever released, *Die Hard Arcade* delivered where it counts. Directed by beat-'em-up veteran Makoto Uchida, the game includes some delightfully over-the-top action, with particular focus on awesome weapons. The combination of a lighter and spray can is vicious, but knocking enemies across the room with an anti-tank rifle remains our favourite bit.



"Played *Death Tank Zwei* for literally years with university flatmates"
GREY FOX

Duke Nukem 3D

■ **DEVELOPER: LOBOTOMY SOFTWARE**
■ **YEAR RELEASED: 1997** ■ **GENRE: FIRST-PERSON SHOOTER**

20 Now, here's an interesting one. *Duke Nukem 3D* was one of two major PC first-person shooters that Sega licensed for Saturn release (the other being *Quake*), with Lobotomy chosen for development duties based on its outstanding work with *Exhumed*. Both turned out well, but *Duke* edged it. It seems that people can't get enough of the Duke's foul mouth and (literal) toilet humour, and Lobotomy's excellent work on the conversion ensured that Saturn owners got the full experience. In fact, with the Nintendo 64 version's censorship and the PlayStation version's technical deficiencies, the Saturn version is arguably the best.

But the reason that this entry is interesting is that many of the votes were cast on the strength of something other than the main game. *Duke Nukem 3D* included a hidden game called *Death Tank Zwei*, accessible by destroying every toilet in the game or having a save for either of Lobotomy's other Saturn games. Taking advantage of the multi-tap to support up to seven players, the game played like a real-time version of multiplayer classic *Worms* – a fun, chaotic blaster that ranks as one of gaming's best ever secrets.



Saturn Bomberman

■ **DEVELOPER:** HUDSON SOFT
■ **YEAR:** 1996 ■ **GENRE:** ACTION

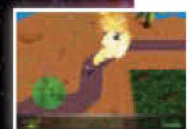
19 *Bomberman* was already renowned as one of the greatest multiplayer games of all time, but the Saturn version actually managed to surpass its predecessors by supporting up to ten players at once – one of the best reasons to own a multi-tap.



Mass Destruction

■ **DEVELOPER:** NMS SOFTWARE
■ **YEAR:** 1997 ■ **GENRE:** SHOOT-'EM-UP

18 This fast-paced tank shoot-'em-up lives up to its name, as most environmental features can be destroyed. While it's pretty simplistic, the game is technically very sound and remains immensely satisfying thanks to some gigantic explosions.



Burning Rangers

■ **DEVELOPER:** SONIC TEAM
■ **YEAR:** 1998 ■ **GENRE:** PLATFORM

17 Sonic Team's final Saturn release saw players rescuing civilians and fighting fires in disaster areas. The game was a technical showcase, featuring large 3D worlds and some impressive visual effects that had been thought to be impossible on the system.



Panzer Dragoon Zwei

■ **DEVELOPER:** TEAM ANDROMEDA
■ **YEAR:** 1996 ■ **GENRE:** SHOOT-'EM-UP

16 The return of *Panzer Dragoon* saw the original game's formula improved, with stages featuring alternate paths and player performance tracking. Coupling these improvements with another quality soundtrack and improved visuals, it perfectly fulfilled its role as a sequel.



Galactic Attack

■ **DEVELOPER:** TAITO
■ **YEAR:** 1995 ■ **GENRE:** SHOOT-'EM-UP

15 Better known as *Layer Section* to the Saturn's importers and *RayForce* to arcade aficionados, Taito's vertically-scrolling shooter made impressive use of sprites to simulate 3D environments and introduced a lock-on laser that could target enemies at a lower altitude.



Athlete Kings

■ **DEVELOPER:** SEGA
■ **YEAR RELEASED:** 1996 ■ **GENRE:** SPORTS

14 **A classic decathlon** game in the style of *Track & Field*, *Athlete Kings* didn't have an awful lot of competition on the Saturn but still managed to impress with tight gameplay and attractive high-resolution visuals. The charm of *Athlete Kings* was its inclusion of an international cast of characters with their own individual strengths and weaknesses – British beefcake Jef Jansens was great at throwing events while Chinese teenager Li Huang was a champion sprinter.

Such was the quality of *Athlete Kings* that the game's Dreamcast successor *Virtua Athlete 2K* failed to live up to its legacy, with fewer events and a notable lack of amusing competitors. Also worth a look is the winter sports sequel *Winter Heat*, which takes many of the game's characters and allows them to compete in a variety of sports that revolve primarily around sliding.

"Jef Jansens in the zebra lycra suit with a 'fro… what a hero!"
ANDREW_VERSION1





Virtua Cop 2

■ **DEVELOPER:** SEGA AM2
■ **YEAR RELEASED:** 1996 ■ **GENRE:** LIGHTGUN SHOOT-'EM-UP

13 **The *Virtua Cop*** series has always aspired to the action movie ideal and much like the best action sequels, *Virtua Cop 2* went above and beyond with the mantra 'bigger, better, more'. While the basic gameplay was more or less identical to that of the original *Virtua Cop*, the second game made a number of improvements, particularly when it comes to level design.

Every stage in *Virtua Cop 2* allows the player a choice of two routes, including the addition of a Saturn-exclusive route for the Expert stage. They're packed with set pieces too, from the car chase of the opening stage to a shootout on an underground train. The range of options available for home players also met AM2's previous high standards, even allowing players to swap *Virtua Cop 2*'s arcade scoring out for the excellent scoring system of the original game.

Exhumed

■ **DEVELOPER:** LOBOTOMY SOFTWARE
■ **YEAR RELEASED:** 1996 ■ **GENRE:** FIRST-PERSON SHOOTER

12 **Thanks to the** saturation of first-person shooters about space marines and the SAS, *Exhumed*'s Egyptian theme is just as refreshing today as it was in 1996 – but it wasn't just thematically novel. Unusually for an FPS of the time *Exhumed* offered a non-linear campaign, exploring design territory that would later be refined by the *Metroid Prime* series – as relics were discovered, players were able to explore levels further by jumping higher or walking on lava.

Though it also appears on the PC and PlayStation, the Saturn version of *Exhumed* receives a lot of love. Lobotomy's command of the hardware was excellent, with the Slavedriver engine – named after *Exhumed*'s US title *PowerSlave* – handling 3D level designs at a high frame rate. Additionally, the Saturn game has exclusive features including power-ups and the original *Death Tank*.

"Proved that the Saturn was a capable machine, in the right hands"
SeanR



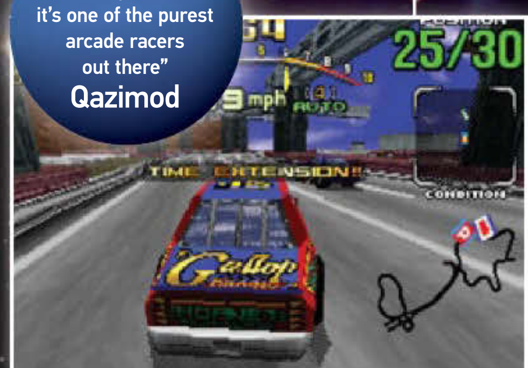
Daytona USA

■ **DEVELOPER:** SEGA AM2
■ **YEAR RELEASED:** 1995 ■ **GENRE:** RACING

11 **Controversy! The conversion** of *Daytona USA* was a frequent target of abuse in the Saturn's early life thanks to a variety of graphical deficiencies – chiefly the letterboxed display and major pop-up. The game was also single-player only, omitting the multiplayer that had propelled the original arcade version to massive success. The scale of the missed opportunity was such that Sega later released an updated game, *Daytona USA Championship Circuit Edition*, which addressed all of these complaints and contained additional tracks. But that one didn't chart – you've voted for the original version here.

You see, despite its visual flaws, the original Saturn version of *Daytona* gets a lot else right – things which were changed in *Championship Circuit Edition*, much to the chagrin of many fans. *Daytona*'s arcade soundtrack, which features lines like "I wanna fly sky high!" belted out in wobbly English, is a key part of the game's charm and successfully makes it across to the Saturn. So too does the all-important handling of the arcade game, meaning that while it looks rough, it *feels* right.

"It looks comically bad, but it's one of the purest arcade racers out there"
Qazimod







Virtua Fighter 2

■ **DEVELOPER:** SEGA AM2
■ **YEAR:** 1995 ■ **GENRE:** FIGHTING

10 **It's hard to** overstate the impact that *Virtua Fighter 2* had – it is, after all, the game a *CVG* review called "the greatest console game ever made". For a start, it looked fantastic. By avoiding the temptation to include the arcade game's 3D backdrops and settling for large scaling sprites, the development team was able to focus on the attributes that would best show off *Virtua Fighter 2*'s incredible animation – high resolution and a high frame rate. The result was a visual appearance that wasn't arcade perfect, but nevertheless raised the graphical bar for the entire console market.

But *Virtua Fighter 2* was hardly a superficial beauty, as it effortlessly surpassed other 3D fighters to become the premier game on the market. The primary improvement over the original game was the addition of two new characters using unorthodox martial arts, the elderly kung fu practitioner Shun Di and teenager Lion Rafale, a user of praying mantis kung fu. All of the returning characters sported a larger repertoire of moves, including the debut of iconic techniques like Jacky's Lightning Kicks and Akira's Hougeki Unshin Soukoshou – better known as the Stun Palm of Doom. Meanwhile, the game allowed players an increased ability to answer attacks, with the introduction of throw escapes and a greater emphasis on reversal moves.

The *Virtua Fighter* series has always been among the most hardcore of fighting games, with layers of depth hiding beneath the simple three-button controls, and Sega made sure to cater for its audience. The game included the original's balance as well as the fixes from *Virtua Fighter 2.1*, alongside a wealth of options including the fantastic Expert Mode that allowed the CPU to learn your favourite techniques. And that's the trick – *Virtua Fighter 2*'s arcade version was a fantastic starting point, but it's the comprehensive conversion work that makes it the perfect start to your top ten.

Street Fighter Alpha 2

■ **DEVELOPER:** CAPCOM
■ **YEAR RELEASED:** 1996 ■ **GENRE:** FIGHTING

9 ***Street Fighter Alpha*'s** revamped visual style and new character roster were massively welcome after four years of the *Street Fighter II* series, but the sequel blew it out of the water. The main new addition was the custom combo, an alternate use for the super bar that gave players a time limit in which to create their own string of attacks. The game's character roster also greatly increased, with Gen, Dhalsim and Zangief returning from previous games. The schoolgirl Sakura was the game's single new character and quickly became a fan favourite, but our favourite inclusion was the knife-wielding *Final Fight* boss Rolento.

"One of the best *Street Fighter* games on what is still the best control pad released"
The-Plethora





Virtua Cop

■ **DEVELOPER:** SEGA AM2
■ **YEAR RELEASED:** 1995 ■ **GENRE:** LIGHTGUN SHOOT-'EM-UP

8 **When introduced in** arcades in 1994, *Virtua Cop* wowed players with its visuals – 3D allowed for convincing environments and enemies with a greater range of animations. The Saturn version successfully replicated that impression, but the real key to *Virtua Cop*'s success was solid mechanics. While the game stuck closely to the fundamentals of the lightgun genre – shoot enemies before they shoot you – the heads-up display identifying the next enemies to fire was a welcome improvement. Better still was the scoring system which rewarded players for avoiding damage and accuracy, and even played into the law enforcement theme – a non-lethal 'Justice Shot' awarding by far the most points.

Baku Baku

■ **DEVELOPER:** SEGA
■ **YEAR RELEASED:** 1995 ■ **GENRE:** PUZZLE

7 ***Baku Baku* is** a falling block puzzler with a structure that will be familiar to players of *Super Puzzle Fighter II Turbo.* Food blocks fall down the screen and must be matched with an animal block, which will eat any food blocks directly connected to itself – and as you're always pitted against an opponent, causing combos will drop blocks onto the enemy's screen, hastening your victory.

Baku Baku was hardly a challenge for the Saturn hardware, with only some nice presentation setting it apart from the extremely faithful Game Gear conversion that arrived in 1996. But nobody cares how hard the hardware is working when the gameplay is up to scratch, and the frequent all-night multiplayer sessions are testament to the fact that *Baku Baku* got it right in that regard.







Radiant Silvergun

■ **DEVELOPER:** TREASURE
■ **YEAR RELEASED:** 1998 ■ **GENRE:** SHOOT-'EM-UP

6 **Be attitude for** gains! The Saturn's most celebrated import release climbs high in your voting, overcoming the challenge posed by its high market price. Treasure can usually be relied on for an innovative approach to a genre, and *Radiant Silvergun* certainly delivered. Instead of rationing weapons via power-ups like other shooters, *Radiant Silvergun* gave you access to a whopping seven by default – all of which were necessary to make it through the game's challenging stages. Treasure pushed the Saturn to the maximum in order to create one of the most visually arresting 2D games of the generation, though freely dropping in 3D objects when needed – most memorably during the game's epic final boss fight.

Fighters Megamix

■ **DEVELOPER:** SEGA AM2
■ **YEAR RELEASED:** 1997 ■ **GENRE:** FIGHTING

5 **Mixing the serious,** hardcore style of *Virtua Fighter 2* with the fast-paced action of *Fighting Vipers* might have seemed like a hard task, but AM2 handled the crossover with ease and produced one of the system's most critically acclaimed fighting games. The game's mammoth roster of 32 fighters included a wide range of unlockable characters, drawn from sources as diverse as *Virtua Cop*, *Rent-A-Hero* and *Daytona USA*. Meanwhile, the gameplay featured a number of improvements from *Virtua Fighter 3* – characters had their new moves, while the new escape button allowed for 3D movement to avoid attacks.



"This game enthralled me, hoovering up days of my life"
WIPER

Panzer Dragoon Saga

■ **DEVELOPER:** TEAM ANDROMEDA
■ **YEAR RELEASED:** 1998 ■ **GENRE:** RPG

4 **We're hard pushed** to conceptualise many shoot-'em-ups as RPGs, but *Panzer Dragoon Saga* made the transition look easy. The setting of the series had always been captivating and the visuals were exemplary. Best of all, the battle system was based on correctly positioning your customisable dragon in order to avoid attacks and strike weak points, allowing for a more involving experience than the standard menu-based combat of its peers in the genre. These days, the game is as famous for its price as its quality, so ensure that you take the opportunity to play it if you can.



Guardian Heroes

■ **DEVELOPER:** TREASURE
■ **YEAR RELEASED:** 1996 ■ **GENRE:** BEAT-'EM-UP

3 **As Treasure's first** Saturn release, *Guardian Heroes* had some big expectations to live up to following a string of Mega Drive classics. The game exceeded expectations, utilising the Saturn's sprite-handling capabilities to produce a beat-'em-up with greater levels of carnage than any before. It also had RPG elements, with players able to develop character attributes and choose different story paths, with multiple endings available. It received a boost in the voting as the only one of Treasure's Saturn games that doesn't require importing – but we'd be surprised to see anyone questioning its top three finish.

"That often-seen RPG-lite stuff that a lot of games since have done? Pretty much stole the schtick from here"
JAYEXTEE

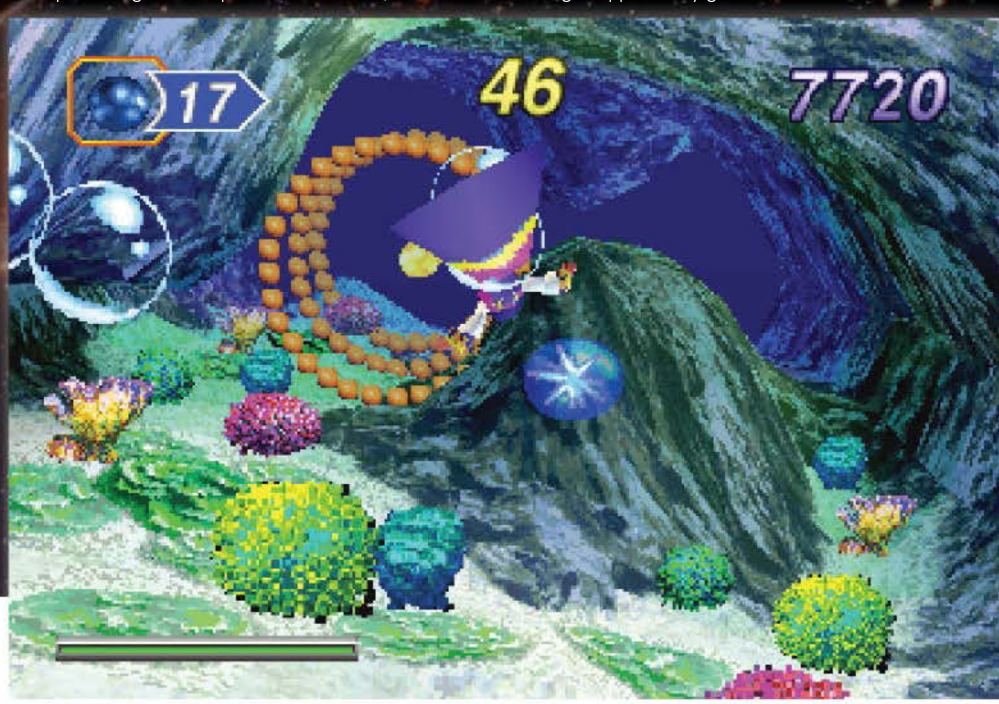


NiGHTS Into Dreams

■ **DEVELOPER:** SONIC TEAM
■ **YEAR RELEASED:** 1996 ■ **GENRE:** ACTION

2 **It's telling that** even after the better part of two decades, we struggled to place *NiGHTS* in a genre – there's simply nothing quite like it. You play as the titular jester, flying around predetermined circuits and collecting items to move on to the next circuit. Once four have been finished, it's boss time. Simple stuff, but the inventive stage designs and impressive visual tricks like warping scenery will keep your attention.

But the moment when you discover the heart of *NiGHTS* is the first time you take the step of prolonging your stay on each circuit to squeeze every point from the time available. This score attack action is demanding, but greatly helped by the precise control afforded by the bundled analogue pad. Ultimately, that's why *NiGHTS* is such a great example of Sega's best qualities – it's a bold, unconventional design supported by good hardware.



Sega Rally Championship

DEVELOPER: SEGA **YEAR RELEASED:** 1995 **GENRE:** RACING

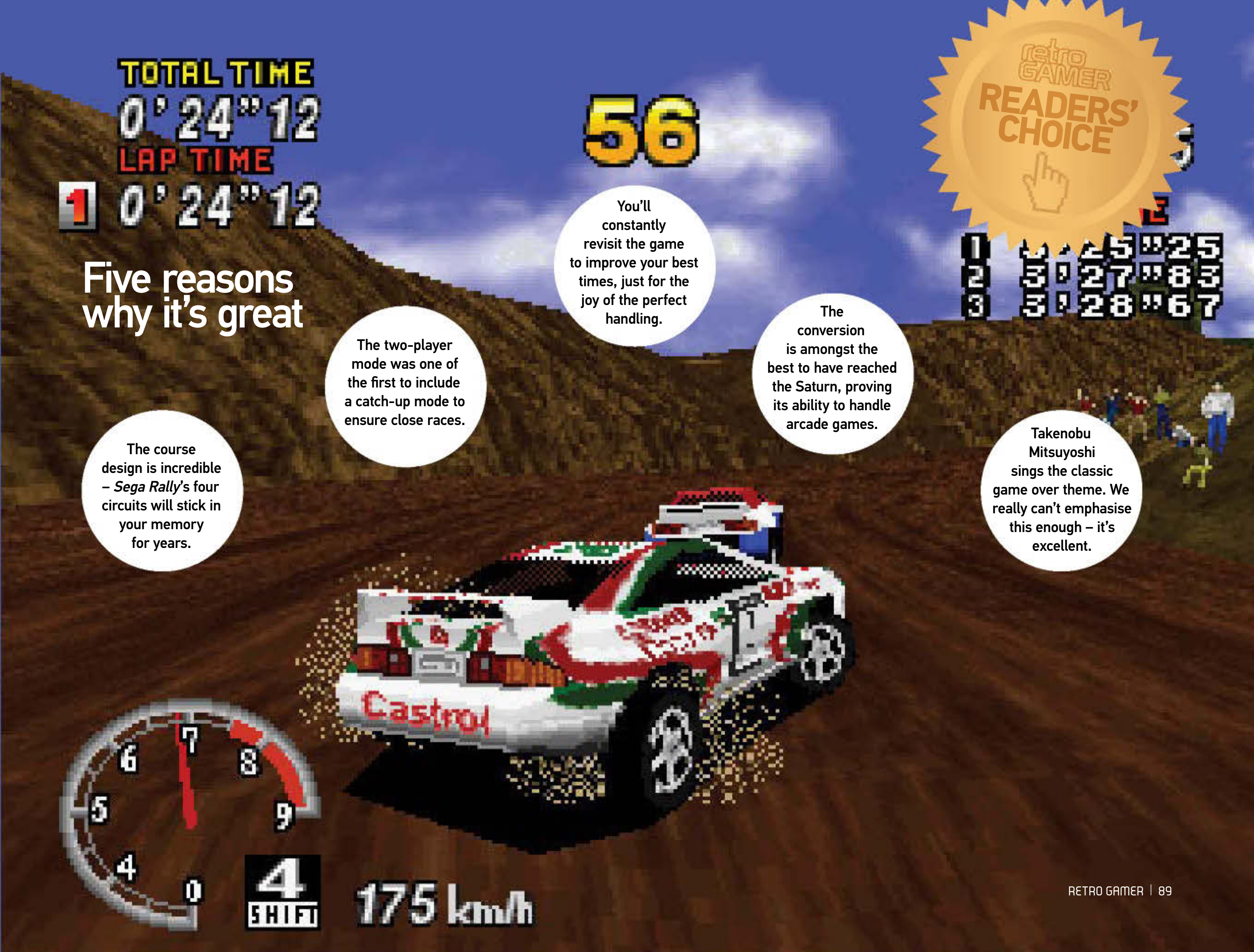
"The best rally game there ever was or ever will be"
RAVEN

1 **When you're looking** at the history of the Saturn, the late stages of 1995 represent a key period for development. This was a time when the press was buzzing with talk about the Saturn's 'big three' arcade conversions – *Virtua Fighter 2, Virtua Cop* and *Sega Rally Championship*. All three had delivered in the arcade, advancing their genres and raking in the cash. Sega promised that these three games were the key releases for the year, games that would give Saturn owners something to shout about and non-owners some very good reasons to pick up the console. As you can tell by the fact that all three have placed in the top ten of this feature, those were promises that Sega delivered on.

It was immediately obvious that *Sega Rally* was a great conversion. The thrill of the arcade game was in its sublime handling; a model of rally racing that superbly captured the shifts in your car's response as it shifted from tarmac to thick mud. Each of the courses – three plus the secret Lakeside track – was expertly designed, with a variety of challenging corners to impede your progress against the 14 other racers in the field. It was a great conversion too. The all-important multiplayer was retained and the visuals were a good approximation of the Model 2 version, with the high frame rate and minimal pop-up quickly banishing the deficiencies of *Daytona USA* to memory.

But *Sega Rally* was a bit different to its brethren in the big three. While *Virtua Fighter 2* eventually had to contend with the likes of *Fighting Vipers* and *Dead Or Alive* and *Virtua Cop* would be superseded by its own sequel, no Saturn game ever came close to toppling *Sega Rally* as the king of the road. It wasn't for lack of competition – challengers came and went, many of them conversions of Sega's own arcade hits. While some were disappointing, like *Sega Touring Car Championship*, the likes of Tantalus Interactive's excellent *Manx TT* conversion posed genuine threats to *Sega Rally*'s crown. All of them failed to dethrone the king.

The reader vote wasn't close. It became clear early on that *Sega Rally* would be at the top of your list, and the eventual scale of its victory was overwhelming – if you combined the votes of the games in second and third, *Sega Rally* would still have been at the top. The compelling st≠ructure of a single race across three stages, the iconic Lancia Delta and Toyota Celica, Takenobu Mitsuyoshi singing the game over theme – this was the perfect convergence of brilliant individual elements into a satisfying whole. We've previously called *Sega Rally Championship* the best racing game ever and you, the readers, have voted it the best Saturn game. There's no question – *Sega Rally* is one of the best games ever.



Five reasons why it's great

The course design is incredible – *Sega Rally*'s four circuits will stick in your memory for years.

The two-player mode was one of the first to include a catch-up mode to ensure close races.

You'll constantly revisit the game to improve your best times, just for the joy of the perfect handling.

The conversion is amongst the best to have reached the Saturn, proving its ability to handle arcade games.

Takenobu Mitsuyoshi sings the classic game over theme. We really can't emphasise this enough – it's excellent.

THE UNCONVERTED

Arcade games that never made it home

MARTIAL MASTERS

■ **Developer:** IGS ■ **Year:** 2001 ■ **Genre:** Beat-'em-up

■ ***Martial Masters* shouldn't be in The Unconverted.** We should be talking about it alongside *Guilty Gear* as a classic that rose up to challenge Capcom and SNK's dominance of the 2D fighting scene. Of course, we're not. That's because *Martial Masters* was a victim of poor timing. IGS released its PolyGame Master arcade board in 1997, targeting the low end of the market occupied by the likes of the Neo Geo – an approach that would give a home to a variety of classic 2D games, but at a time when the arcade market was thrilled with 3D games.

The action in *Martial Masters* is standard one-on-one fighting fare, but the game boasts a number of distinguishing features. Chief amongst them is the variety of fighting styles employed by the diverse cast of characters, some of which like capoeira are uncommon in 2D games, while others like Scorpion's bizarre style appear to be unique to *Martal Masters*. Each character boasts the standard issue variety of special and super moves, as well as shadow moves which briefly summon a clone of your fighter. These consume some of your super bar, but are great for extending combos or low risk counter-attacks. *Martial Masters* is a treat for fans of 2D visuals, with beautiful sprite work giving an appearance that is equal to anything from Capcom and SNK in the mid-Nineties. The sound is a bit weaker, with the compositions never reaching the level of quality achieved by the graphics or gameplay, but this is a relatively minor problem.

The overall package is one which could have taken the market by storm had it arrived in the mid-Nineties, and it's telling that our colleagues on other magazines guessed that it did. Sadly, by 2001 even huge crossover titles like *Capcom Vs SNK 2* were struggling for the attention of the gaming public, a factor which doubtless helped to keep *Martial Masters* confined to the arcade. IGS games almost never receive conversions as the company doesn't develop console games itself, and with the low popularity of 2D fighters at the time it's unsurprising that console developers passed over it. It's a real shame, as *Martial Masters* is amongst the best titles that the Taiwanese manufacturer has released.

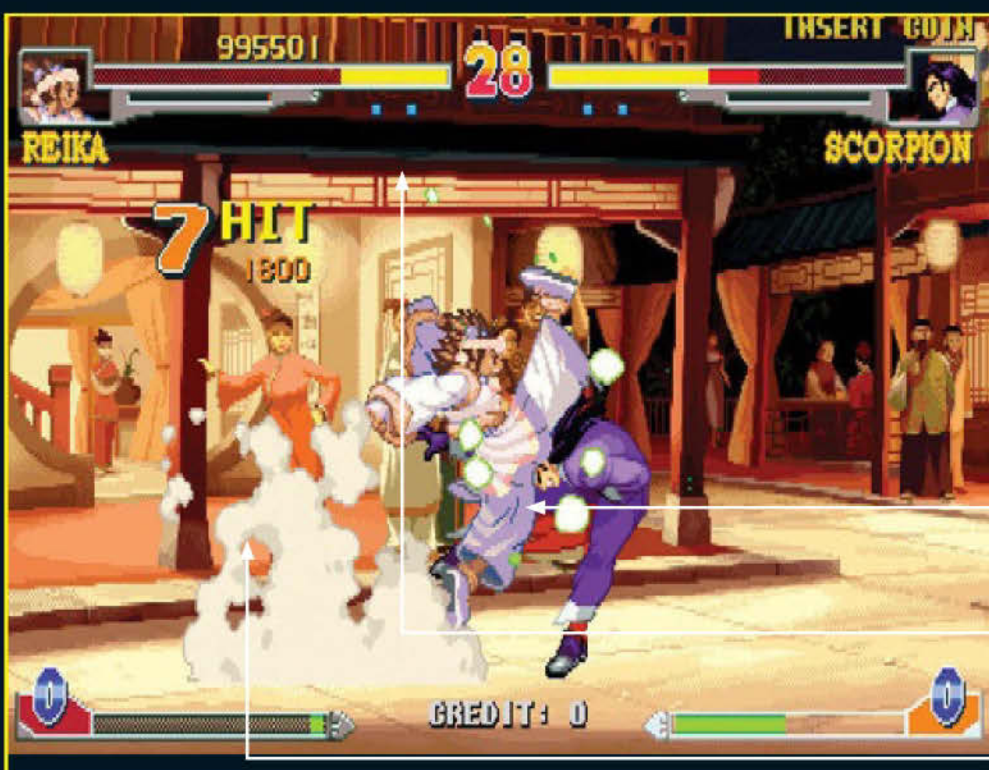


CONVERTED ALTERNATIVE

SPECTRAL VS GENERATION 2005

IGS games rarely receive conversions, but this is the exception that arrived on the PS2 and PSP in 2006. *Spectral Vs Generation* was a collaboration between IGS and Idea Factory, and was a crossover of the latter's *Spectral Force* and *Generation Of Chaos* RPG series.





» Unorthodox fighting styles abound – Ghost Kick uses capoeira, while Scorpion crawls around with a leg curled over his back, imitating his namesake.

» *Martial Masters* is a combo-friendly game, thanks to the inclusion of shadow moves that can keep your offence going. That said, double-digit combos are a challenge to reach.

» Backdrops are often inspired by Chinese culture, befitting the game's Taiwanese origin. It's a nice touch for those who appreciate something different to the Japanese games available.

» Dust clouds and pyrotechnics are common sights during matches in *Martial Masters*, adding a level of visual polish that lesser games in the genre lack.

KNIGHTS OF VALOUR

■ **Developer:** IGS ■ **Year:** 1999 ■ **Genre:** Scrolling beat-'em-up



» [Arcade] You'll often need to deal with a large number of enemies, keeping action frantic.

■ **Many games over the years have taken their inspiration from the Chinese historical novel *Romance Of The Three Kingdoms*, from RPGs and strategy games to a great number of beat-'em-ups.** It can be hard to stand out from this crowd, but *Knights Of Valour* manages by adding some unusual elements to the scrolling beat-'em-up formula. Chief amongst the additions is the item system, which differs from the usual single-use beat-'em-up weaponry by way of a mini-menu, allowing items to be stored for situations that require them. There's also a level system, which allows players to gain faster and stronger attacks.

Beyond that, *Knights Of Valour* is a typical scrolling beat-'em-up, albeit an exceptionally well-crafted one. Each character has their own strengths and weaknesses as well as a range of special attacks, and stages even allow for multiple routes. Being late 2D game, it also looks absolutely superb – the screen is always populated by a variety of detailed, well-animated sprites. Though it was overlooked in its own time due to its 2D visuals, *Knights Of Valour* is an excellent choice for beat-'em-up fans looking to try something outside of the usual Capcom, Konami and Sega ranges.

GRAND TOUR

■ **Developer:** IGS ■ **Year:** 1993 ■ **Genre:** Puzzle

■ ***Grand Tour* is one of those bizarre arcade games that combines a relatively simple game with the opportunity to look at pixilated ladies.** Why this was a popular thing to do in the Nineties, we don't know, but it was hardly the only game to do this. In this case, the simple game is a falling block puzzler of the type you'll have played a million times before – much like in *Columns*, your goal is to match three blocks vertically, horizontally or diagonally, but blocks fall in rotatable pairs as in *Puyo Puyo* or *Super Puzzle Fighter II Turbo*.

There are a couple of wrinkles in the formula to differentiate it from the rest of the puzzle crowd. The first of these is the fact that grey null blocks will occasionally drop, irremovable irritations that will hasten the end of your game. There's also the fact that each stage after the first comes with a pre-defined layout of blocks, which will need to be cleared to access the bottom of the well. *Grand Tour* is a reasonably playable game, but it's clearly the less than spectacular work of a developer that was still learning its craft.



» [Arcade] *Grand Tour* is pretty unremarkable in visual terms, setting expectations at exactly the right level for the gameplay.

Karl Hilton

What cherished games would you take to the island?

From GoldenEye to Crysis 3, Karl Hilton has had his finger on the trigger of some of the finest FPS games of the last two decades. Paul Drury becomes his monkey assistant

There's a definite theme running through Karl Hilton's extensive videogame work. From *GoldenEye 007* and *Perfect Dark* to *TimeSplitters* and *Crysis,* all of his games have featured big guns and nasty headshots. We start to worry a little. Is Karl a violent man?

"Absolutely not," he protests. "That's the fun of games, isn't it? You do stuff you wouldn't do in real life!"

We breathe a sigh of relief, especially given we're sat in Karl's office, an enclosed space with frosted glass and no obvious escape route. The mood is further lightened when a tray of pastries arrive – a Friday tradition in the Nottingham studio of Crytek UK – and as we tuck into a pecan plait, Karl tells us about dabbling with a Commodore PET, aged ten, at his father's architecture company. Christmas 1982 saw his old man acquire a Dragon 32 for the Hilton house, though he thankfully made amends for this by replacing it with a Spectrum the following year. Karl's sights were set even higher, though. He saved up the considerable sum required to purchase an Atari 400 in 1984 and then began trying to recoup some of his outlay. "Me and my friend Leigh Howells pretended we had our own computer games company called Genetyx," he chuckles. "We wrote some games, with me doing the Atari version and Leigh doing the Spectrum one. We even made a logo and stuck it on the bedroom door."

Perhaps you tapped in the listings for *Sub Sea*, *Fizzbit* and numerous other efforts, which earned the aspiring pair £10 a time when published in the pages of magazines such as *Sinclair User* and *Atari User.* Karl never lost his love for computer gaming and coding and when he ended up following in his father's footsteps and studying architecture at Birmingham University, he soon set up residency in the computer lab. After three years of using high-end Macintoshes to model 3D structures, which of course would prove an excellent preparation for building videogame worlds, he moved to Bournemouth to take an MA in the snappily-titled Computer Visualisation and Animation Systems. On graduating in 1994, Karl was encouraged by a tutor to apply to a company called Rare, who had previously recruited graduates from the course. "He said they worked out of this barn in the middle of nowhere so it didn't sound like a great opportunity," says Karl. "Then I discovered they used to be Ultimate Play The Game and I sent my CV off immediately…"

A youth playing *Knight Lore* and *Jetpac* was enough to convince Karl to leave the south coast for rural Twycross. After a few months getting comfortable with Power Animator on Silicon Graphic machines, he joined the team converting *Killer Instinct* to the SNES and began working on level backgrounds. After some disagreements with the lead artist, Karl was pleasantly surprised when a chap called Martin Hollis wandered in from another team at Rare and asked him if he liked *James Bond*.

"I said 'of course I do!'" exclaims Karl. "He told me they had the licence for *GoldenEye* but back then, all film licences were terrible. We knew we'd be up against that reputation plus Rare and Nintendo were keen for us to do a SNES game and Martin was adamant it should be for Nintendo's new console, which we knew nothing about, and it had to be 3D!"

So the trio of Karl, Martin and programmer Mark Edmonds began making plans for an ambitious take on the *Bond* world. Initially the talk was of creating a top-down game in the style of the original *Grand Theft Auto* but a trip to Sega World in Tamworth introduced them to *Virtua Cop* and gave them a new perspective on the project. "We put a load of money into the machine and played it right through," recalls Karl with a glint in his eye. "We thought, well this is 3D and on-rails… maybe we could do something like this?"

Armed with the *GoldenEye* script and plenty of photos taken during a visit to the film set, Karl set about modelling the satellite control area as a test. Lunchtimes spent playing multiplayer *Doom* convinced the small team to take the game off-rails and soon it had the iconic opening dam level as Karl and the gang got to grips with the new N64 hardware. "We were making a relatively violent first-person shooter, which

Trivia

Harry Tipper, the hippie special agent in *TimeSplitters: Future Perfect*, was actually based on an IT manager at Rare. "The accent, the moustache and the slightly Seventies clothing was all him," explains Karl. "He was a brilliant guy and we wanted to honour him."



Who doesn't love heavily armed monkeys?



“When I discovered Rare used to be Ultimate Play The Game, I sent my CV off immediately”

Karl Hilton

FIRST JOB
Paperboy

CURRENT JOB
Managing Director, Crytek UK

FAVOURITE FILM
Blade Runner

FAVOURITE ALBUM
Pink Floyd – The Wall

FAVOURITE BOOK:
Anything by Clifford D Simak

FIRST COMPUTER/CONSOLE
Atari 400

FAVOURITE COMPUTER/CONSOLE
PlayStation

BEST GAMING ACHIEVEMENT
Making the first TimeSplitters. We worked so hard and so much of that game is me.

BEST-SELLING PRODUCT:
GoldenEye 007

BEST HOLIDAY
Scuba Diving

WHO YOU WANT TO BE STRANDED WITH
My wife, of course. If she isn't available then Scarlett Johansson.

DESERT ISLAND

145235-46746546546546

SEX
M

NAME
Karl Hilton

DATE OF BIRTH
30.7.1970

PLACE OF BIRTH
London

BIOGRAPHY
After starting his career at Rare as lead artist on GoldenEye 007 and Perfect Dark, Karl co-founded Free Radical Design, the developer behind the TimeSplitters series. He is currently managing director of Crytek UK.

Timeline

1997



GOLDENEYE 007
■ **YEAR:** 1997
■ **FORMAT:** N64
A shot in the arm for console shooters, this seminal title proved film licenses don't have to be rubbish. See **RG**38 for a full Making Of feature.

2000



PERFECT DARK
■ **YEAR:** 2000
■ **FORMAT:** N64
Though he left before it was released, Karl's work on this ambitious shooter was enough to make him very proud when it won a BAFTA.

2000



TIMESPLITTERS
■ **YEAR:** 2000
■ **FORMAT:** PS2
The first release by Free Radical Design, co-founded by Karl after leaving Rare, was this fast and funny FPS that excelled in multiplayer.

2002



TIMESPLITTERS 2
■ **YEAR:** 2002
■ **FORMAT:** PS2/Xbox/GC
A sequel done as they should be – bigger, braver and polished in every area. Worth playing for the mini-games and monkey business alone.

Praise for Karl

Here's what **Retro Gamer** has to say about Karl Hilton's games…





Darran Jones
While it would be all too easy to mention *GoldenEye*, it's *Perfect Dark* that leaves the biggest impression. It's packed with imagination, clever level design and brilliant weaponry. A classic example of a developer building on existing groundwork when it no longer has access to the original IP.





Paul Drury
GoldenEye takes some beating, and who hasn't lost hours to its multiplayer mode? But I especially like the visual style of *TimeSplitters*. Karl brings a distinctive artistic vision and a British sense of humour to his games. Plus as MD of Crytek UK, he has sneaked in *Defender* graphics. Respect due.

wasn't something Rare had done before," he explains. "They were still working on *Donkey Kong Country* and *Diddy Kong Racing* but they were very supportive. They let us get on with it but the vibe came back that this wasn't a Rare game, that it was too dark and forbidding. I was told repeatedly the graphics were too dark. I said, 'But I'm trying to make it look like the film!'"

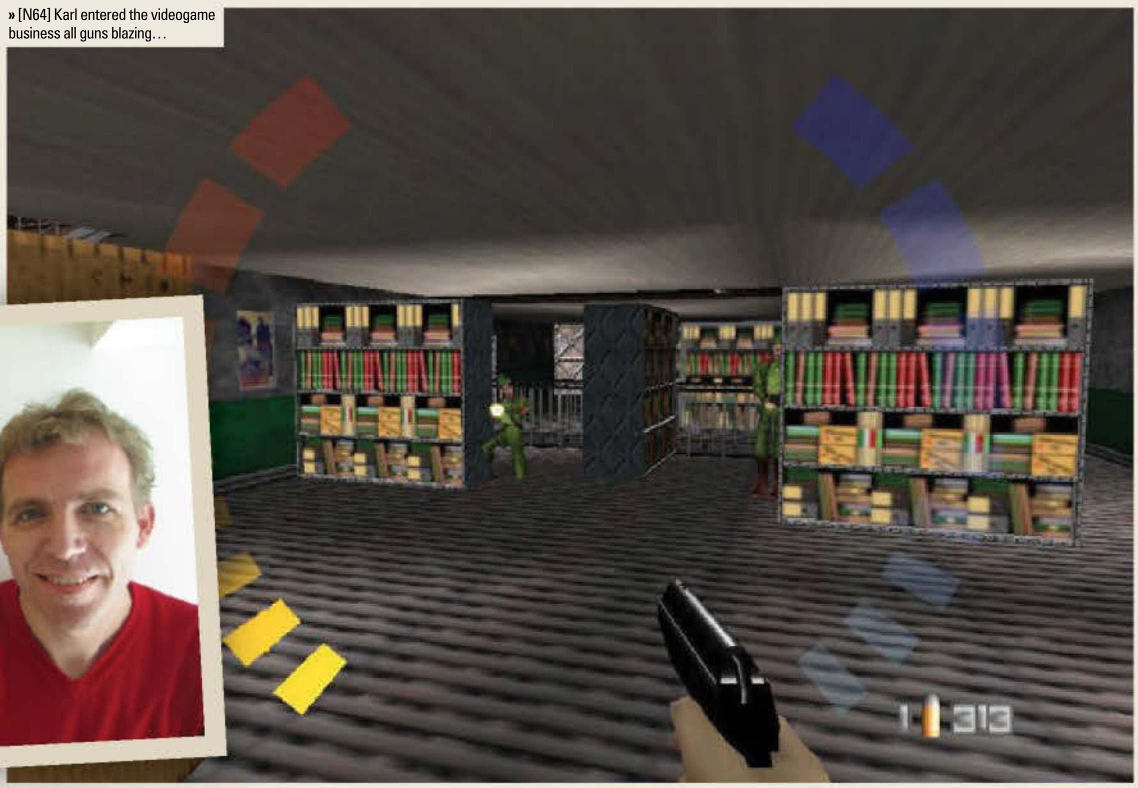
The *GoldenEye* team, which had now swelled to eight, stuck to its guns and delivered what would become one of the N64's defining titles. 8 million copies sold suggests it made the right call though it was immediately made clear that the *Bond* licence had been a one-game deal for Rare, so no direct sequel was possible. However, the astonishing success of *GoldenEye* meant a follow up of sorts seemed sensible; something similar but not set in the *Bond* universe. Adopting a sci-fi theme was one way to differentiate the new project from the last, as was giving the game a heroine that didn't shake her own Martinis. "Plus Lara Croft has just come on the scene," notes Karl. "It became a no-brainer to give it a female lead."

Karl became lead artist on *Perfect Dark* and created most of the game's environments together with Duncan Bottwood and David Doak, both *GoldenEye* veterans. The game engine was rewritten to be fully 3D, the overall performance was improved and *Perfect Dark* incorporated many interesting ideas, notably the asynchronous 'Counter Operatives' mode. However, in late February 1999, having completed most of the background art that would appear in the finished game, Karl left Rare. What convinced him to depart from a company at the peak of its creative and financial powers, we wonder?

"Martin Hollis, I suppose," says Karl with a wry smile. "He'd left Rare but before he went, we'd been talking as a group about setting up on our own. We were such an independent little team it was obvious we could go off and do it for ourselves. We were all entrepreneurial. Back then if you had the right game, a small company could do really well. Why wouldn't you do it? I mean, I'd wanted my own company since I had the Genetyx logo on my bedroom door as a kid!"

Karl certainly felt a wrench and talks fondly of founders the Stamper brothers and their ethos of creating quality games without too much concern for deadlines and financial constraints. Yet he was undoubtedly excited at the prospect of creating an independent studio with David Doak, Lee Ray, music maestro Graeme Norgate and Steve Ellis, master coder and the man responsible for *GoldenEye*'s exquisite multiplayer mode. With computers bought from PC World, furniture from IKEA and a PS2 development kit from Sony, Free Radical Design, based in the old Raleigh building in Lenton, Nottingham was officially born on 1 April 1999.

"Steve got things up and running on the PS2 within the first week," remembers Karl. "Sony saw it and immediately sent us a load more machines. I remember we got an irate phone call from Core Design down the road in Derby. They were working on the next Lara Croft game and were complaining we had more dev-kits than them!"



» [N64] Karl entered the videogame business all guns blazing…



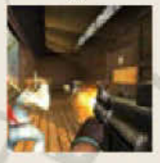
» Karl in his Crytek UK office with some of his glorious back catalogue.

2004 2005 2013 2014

SECOND SIGHT
■ **YEAR:** 2004
■ **FORMAT:** PS2/Xbox/GC
We loved the psychic powers and time-twisting narrative but awkward controls and a late change in publisher means this was overlooked on launch.



TIMESPLITTERS: FUTURE PERFECT
■ **YEAR:** 2005
■ **FORMAT:** PS2/Xbox/GC
A blast through the past with an entertaining storyline and multiplayer. Karl deems it the highlight of the series.



CRYSIS 3
■ **YEAR:** 2013
■ **FORMAT:** PS3/Xbox 360/PC
Crytek UK's admirable work on the multiplayer element of both the second and third instalments of the *Crysis* series did Prophet proud.



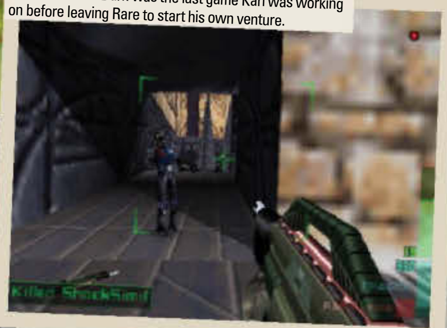
HOMEFRONT 2
■ **YEAR:** 2014
■ **FORMAT:** TBC
Having proven its considerable worth, Crytek UK, with Karl at the helm, is currently working on this high profile sequel, due for release later this year.





» [PS2] *TimeSplitters* made the PlayStation 2 launch line-up and put Free Radical Design on the map.

» [N64] *Perfect Dark* was the last game Karl was working on before leaving Rare to start his own venture.

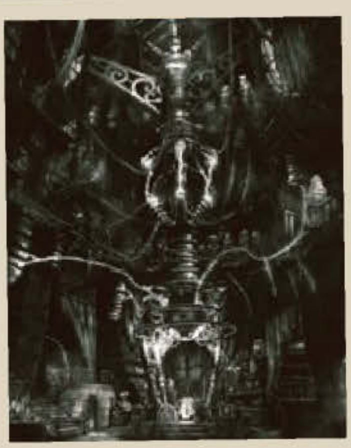


“The vibe came back that GoldenEye 007 wasn't a Rare game, that it was too dark...”

Karl Hilton

Time to Split

"We had a demo level up and running," explains Karl on the elusive fourth instalment of *TimeSplitters*. "We had this bizarre gothic medieval castle with a central courtyard and a fountain with fishes and a monkey in a suit of armour running around. I think Cortez would've been in it but we didn't really get far with the story. We had a new engine, a very shiny renderer for the armour and water and had 20 characters running around in the space at 60 frames per second. It was all about showing off!" Sadly, the game didn't survive the closure of Free Radical Design but Karl reveals that Crytek acquired the IP and the Yerli brothers who own the company are fans of the franchise, so *TimeSplitters 4* may one day materialise… hopefully with medieval monkeys aplenty.



The initial plan was to produce an ambitious story-driven stealth-cum-shooter game called *Redemption* but when the European release date of the PS2 was pushed back to late 2000, the boys realised that if they scaled back their plans and dispensed with sleep, they might be able to produce a launch title. Artist Ben Newman had recently joined the team and his imaginative character designs gave them an idea. "The most popular thing in *GoldenEye* was the multiplayer, so we said, forget the single-player, forget the narrative, we can use all these amazing characters and it can be a mish-mash of levels… and we can get it done for launch."

The result was the slick and stylish *TimeSplitters*, a first-person shooter with a *Quantum Leap* quality. The team let their imagination stretch across eras, including a memorable pyramid setting inspired by the Aztec level in *GoldenEye*, and though there was a simple 'get there and back' single-player mode, the emphasis was on gathering gamers together, plugging in a multi-tap and letting them blast each other to pieces. This it did admirably well, though there was still room for the prescient inclusion of a level editor.

"The way I constructed the levels," explains Karl, "was that I'd have rooms and corridors and then wherever I put a door, that was a 'portal' and that told the engine what to render for the next room. When Dave [Doak] came and told me to change something, I could put in a portal and connect it to somewhere else. It was like being an architect! We realised we had a really pluggable system and it wouldn't take much to reveal that to players, give them the bits and let them stick stuff together."

Creative console gamers could now become modmakers and exchange their creations via PS2 memory cards in the days before uploading user-generated content online was commonplace. *TimeSplitters*' uncomplicated sense of fun together with this innovative feature meant the game really stood out amongst the launch line-up and suddenly this little company in Nottingham, the only European developer to have a launch title, had an international profile. It quickly began work on a sequel, this time developing for all console platforms, grew the team to 45 employees and moved to larger premises in sunny Stapleford, on the Nottinghamshire-Derbyshire border. The time-travelling theme and stylised visuals remained, as did the team's enduring affection for monkeys.



Hilton on Hilton

Karl targets his three favourite projects



■ **GOLDENEYE 007**
Everything was new and fresh. There were no rules because it was the first console first-person shooter and so you didn't have to look at anyone else's game.



■ **PERFECT DARK**
It was the chance to put right all the mistakes we made in *GoldenEye*! *Perfect Dark* was the game we made when we thought we knew what kind of game we wanted to make.



■ **TIMESPLITTERS**
It was done for ourselves, it was our company and we weren't worried about anything apart from multiplayer fun. We just played it again and again till we got it right.

Readers' Questions

Mayhem: What aspects have you liked and disliked in the way first-person shooters have changed over the years?
I like the overall quality and the open-world element you get with some these days. They're just so immersive, especially played on a big screen. What I don't like is there aren't many with any fun in them anymore. They're about terrorists and nuclear weapons and death… just all so serious!

ArchaicKoala: I was really looking forward to the Game Boy Camera option in *Perfect Dark* so needless to say I was gutted when I heard this was cut before release. Was this feature really removed for technical reasons or was it down to the fallout from the Columbine Massacre?
I think it opened up a whole load of issues it would've been difficult to deal with. Being able to shoot recognisable people wouldn't have been the right thing to do at the time.

Hitman_Halstep: How did you decide on the different eras and themes for the *TimeSplitters* games?
They were partly determined by me wanting to build a variety of environments – stone, metal, wood… we'd look at what eras would fit. Then it was about getting a nice break in time. We didn't want to go 12,000BC! And it was partly based on weapons. If you go too far back, you'd need a reason why you had certain weapons.

Northway: Has enough praise been heaped on the music from the Chicago level in *TimeSplitters 2*?
Graeme did all of the audio, back then at FRD and here at Crytek. He's an awesomely talented guy. You throw something at him, he'll come back with something great. We always ask him for compilations of stuff he's done so we can sit and listen to them.



» [PS2] *TimeSplitters: Future Perfect* features the high camp Harry Tipper. Make this man the face of Movember!



» [PS2] *Second Sight* was something of an overlooked gem.

"There was general agreement across the company that monkeys were funny so why wouldn't you put them in," laughs Karl. "Plus we wanted a small character, like Oddjob in *GoldenEye*, as he annoyed people in multiplayer. I like putting bizarre, cartoony characters in these super real but slightly odd, over-the-top backgrounds. It makes the whole thing slightly surreal. The whole point was to be different from other first-person shooters."

TimeSplitters 2 stood out as a resounding success and gave Free Radical Design the financial resources and stature to further expand. While one team, led by Hasit Zala, continued work on the third *TimeSplitters* instalment, Karl became lead artist for the group that would revisit the *Redemption* project that it had originally intended as its debut. It was to be a departure from previous work; the action switched from first to third-person and an array of psychic powers such as telekinesis and possession were included, offering many creative ways to tackle levels. A time-travelling element remained but with this game, players could revisit key events in their past and change the narrative course of their future. Renamed as *Second Sight*, this was Free Radical showing it could handle a grown-up, story-driven game and it was confident it had created something special.

"It was our *Metal Gear Solid* killer," declares Karl, "and we were gutted when it didn't do well. The reviews were okay but we didn't get the plaudits for the story we were hoping for. It felt to us like they were missing the point – complaining about the controls and not seeing the whole game."

Trivia

When the first *TimeSplitters* was up for a BAFTA in 2000, it was the first time Karl had seen his old bosses at Rare since leaving the company. "We didn't win but *Perfect Dark* did, so I felt like I sort of won," he says, "and I did shake hands with Chris Stamper."

Still, the third chapter of the *TimeSplitters* series, given the suffix *Future Perfect* after a change of publisher from Eidos to EA, was a cracking high-tempo shooter with a distinctive visual style, cheeky sense of humour and an especially well-designed map maker. A fourth episode was planned (see boxout) and, undeterred by the disappointing sales of *Second Sight*, Free Radical began work on new IP. *Haze* was planned as a thinking gamers' FPS, touching on issues of 'war for natural resources' and the use of drugs to enhance the fighting ability of troops. With nods to everything from *Apocalypse Now* and *Deep Space Nine*'s Jem'Hadar soldiers to real-world conflicts in Iraq and Vietnam, it sounded a very promising project. In addition, LucasArts had commissioned the company to produce a version of *Battlefront* using the biggest IP in the world: *Star Wars*. Things seemed very rosy for the FRD boys, and we clearly remember pulling into their office car park in 2007 and parking our Skoda between a Porsche 911 and a Ferrari 355. Yet by the following Christmas, Free Radical was no more.

"That Ferrari was mine," sighs Karl. "The credit crunch hit us and LucasArts changed their priorities. All the money stopped flowing. *Haze* was released but it wasn't the quality it needed to be. It was trying to do too much and our technology just wasn't sorted yet. It was released to hit a deadline that wasn't realistic and it flopped dreadfully. Everything just went a bit wrong."

Sadly, Free Radical Design was wound up in December 2008 but a group of key people, including Karl, stayed as a unit and were bought out by German developer Crytek, which was keen to move its *Crysis* series onto consoles. With Karl as managing director, the Nottingham-based studio applied its considerable collective experience and handled the multiplayer component of *Crysis 2* and *Crysis 3* as well as contributing technology to the powerful CryEngine that drives some of the finest FPS games in the genre. Having earned its stripes, the studio has been given full creative control of *Homefront 2*, due for release later this year. Karl is clearly proud of what he has built at Crytek UK but as we finish off our pecan plait, we wondered if his architect dad is proud of how his son has ended up using his architecture degree?

"I remember showing him the work I'd done on Notre Dame for *TimeSplitters* and I think he was quite impressed," smiles Karl. "Architecture is a great background for making games. You do all about space, size, function, materials, engineering… the things that help you build believable backgrounds in videogames. The thing that pisses me off is when I'm playing a game with beautiful art and I see a bizarre arch and think, 'Hang on, that doesn't fit? That's nonsensical structural design!'" It seems you can take the boy out of architecture but you can't take architecture out of the boy…

» [PS3] Crytek UK did a fine job on the multiplayer modes for both the second and third instalments of the *Crysis* series.



Karl Hilton

Desert Island Disks

The games that Karl Hilton just couldn't live without and why he loves them

01



02



03



04



05



06



07



08



01 Defender (ARCADE)

It's fast and it's twitch. It does everything a videogame is supposed to do. It's noisy, quick-witted and has a bit of randomness but not too much. Whenever you die, you always think 'I didn't have to die there'. I could've done better.

02 Rescue On Fractalus! (ATARI 400)

The first 3D game I played. You were flying over this fractal landscape. You started in orbit and you went down to the planet, flew around and rescued these guys. To me, it felt like a real 3D world. And when the aliens smashed your screen, I jumped a mile! It was the first videogame that scared me.

03 Tempest 2000 (JAGUAR)

I went to a computer show when I was 13 and Jeff Minter was selling his Llamasoft games there. I was a huge *Attack Of The Mutant Camels* fan and there he was, asleep on the floor and me and my friends were like, 'Look, it's Jeff! He's under the stall! Asleep!' Jeff makes brilliant shooters and this is such a fast, fun game.

04 SimCity (PC)

The first game where I sat down at a PC and didn't get up again for five hours. Bizarre really, building these little roads and train tracks. I didn't get it at first but after 20 minutes I was hooked. My introduction to strategic god gaming and it's a genre I still love.

05 Transport Tycoon (N64)

I was playing it while we were working on *Perfect Dark* at lunchtimes and I actually broke it. I played it for so long, it started counting down the amount of money I had. Steve Ellis explained it to me – something about it being an 8-bit number. I love it and I'm proud of breaking it!

06 Command & Conquer (PC)

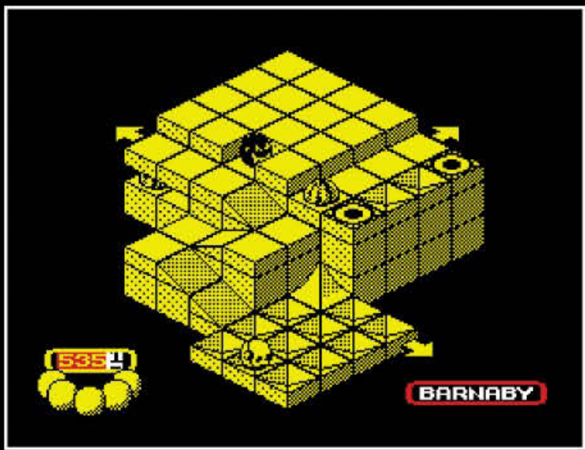
The first real-time combat strategy game. I played it so much at Rare and in the early days of Free Radical Design. So much fun and a really good multiplayer game as well – battling someone else, building up your base, managing your resources. So good.

07 Gran Turismo (PLAYSTATION)

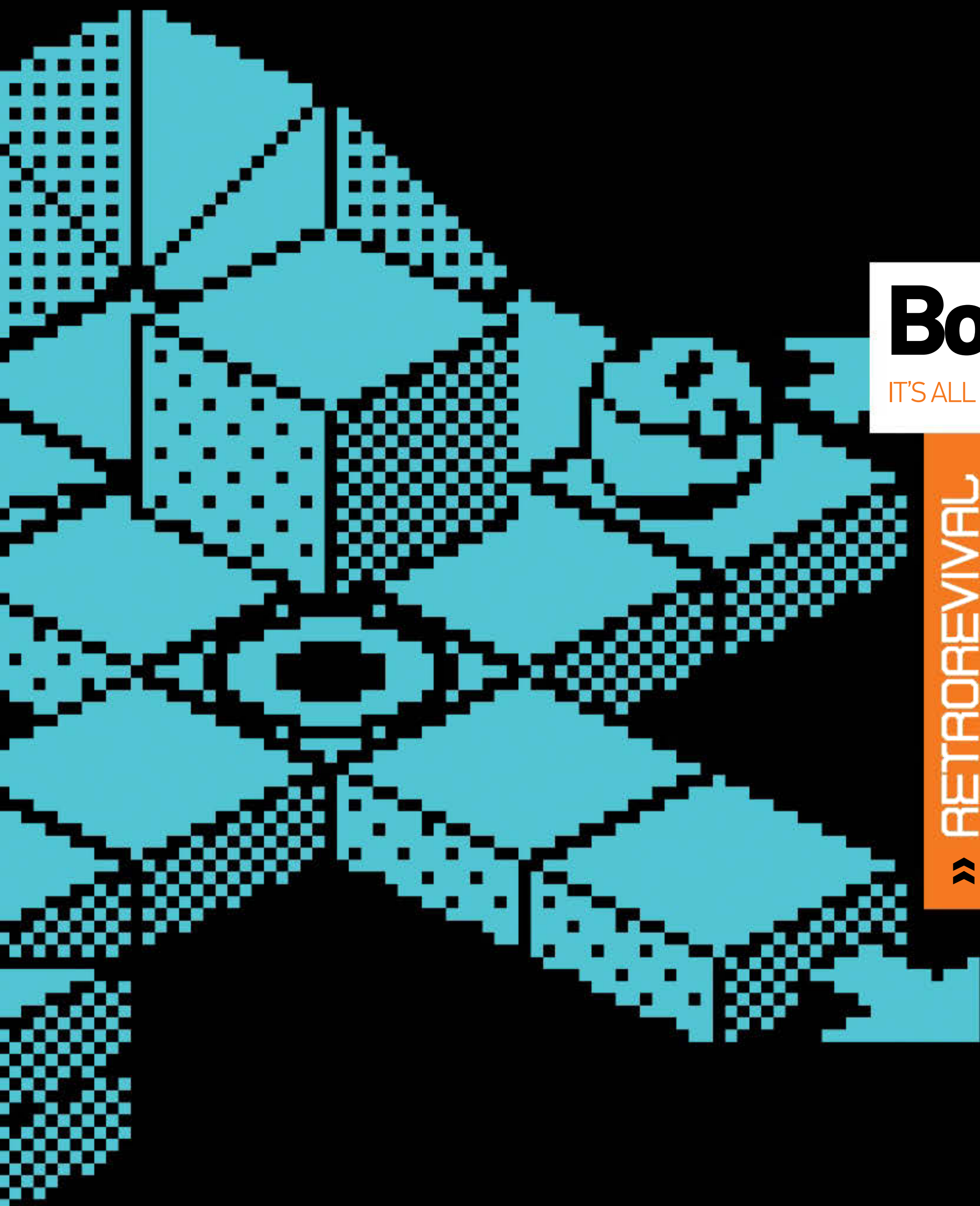
Such a revelation. I'd always played racing games through the years and they'd been quite crude affairs. They were getting better but this let you have your own car! I had an MR2 at the time and I could drive that in the game. And it was so shiny! I'd just watch it rotate and think, 'That's amazing'. You could tell the difference in car handling, too. It just blew me away.

08 Forza 4 (XBOX 360)

I have my Xbox 360 console under the big TV in my office and I fire it up at lunchtimes and try to get round the Nürburgring in my Ferrari F355 in less than eight minutes!


535
BARNABY


741



Bobby Bearing

IT'S ALL ABOUT THE CURVATURE...

» RETROREVIVAL



» ZX Spectrum
» Edge
» 1986

Nowadays developers are always coming up with fancy new terms to explain everyday game mechanics. Destiny is referred to as a 'shared-world shooter' when it's clearly a MMO, while *Battlefield*'s Levolution likes to pretend dynamic playfields didn't exist until DICE said so.

Amazingly though it's nothing new, with developers using similar tactics back in the day. Take Edge's enjoyable *Bobby Bearing* for example. It's effectively a clone of Paul Shirley's brilliant *Spindizzy*, which itself has clear connections to Mark Cerny's *Marble Madness*, but Edge came up with some creative buzz words to deflect some of the comparisons. The neat physics featured in *Bobby Bearing* were possible because of 'Curvispace 3D', which the instructions stated "allow you to experience curvature in 3D space on your home micro". Ultimately it didn't make the game any different from its peers – but it hooked enough people in, which obviously worked in *Bobby Bearing*'s favour.

Ironically, clever terms weren't needed though, as *Bobby Bearing* is a surprisingly enjoyable game. It lacks the clever design and pacing of *Spindizzy*, but it remains a rollicking good adventure, with Bobby exploring the treacherous terrain in search of his four missing brothers who have been lured away by Bobby's cousin. In addition to the devilishly designed levels, time is also your enemy, and your generous counter quickly ticks away as you hit more and more hazards.

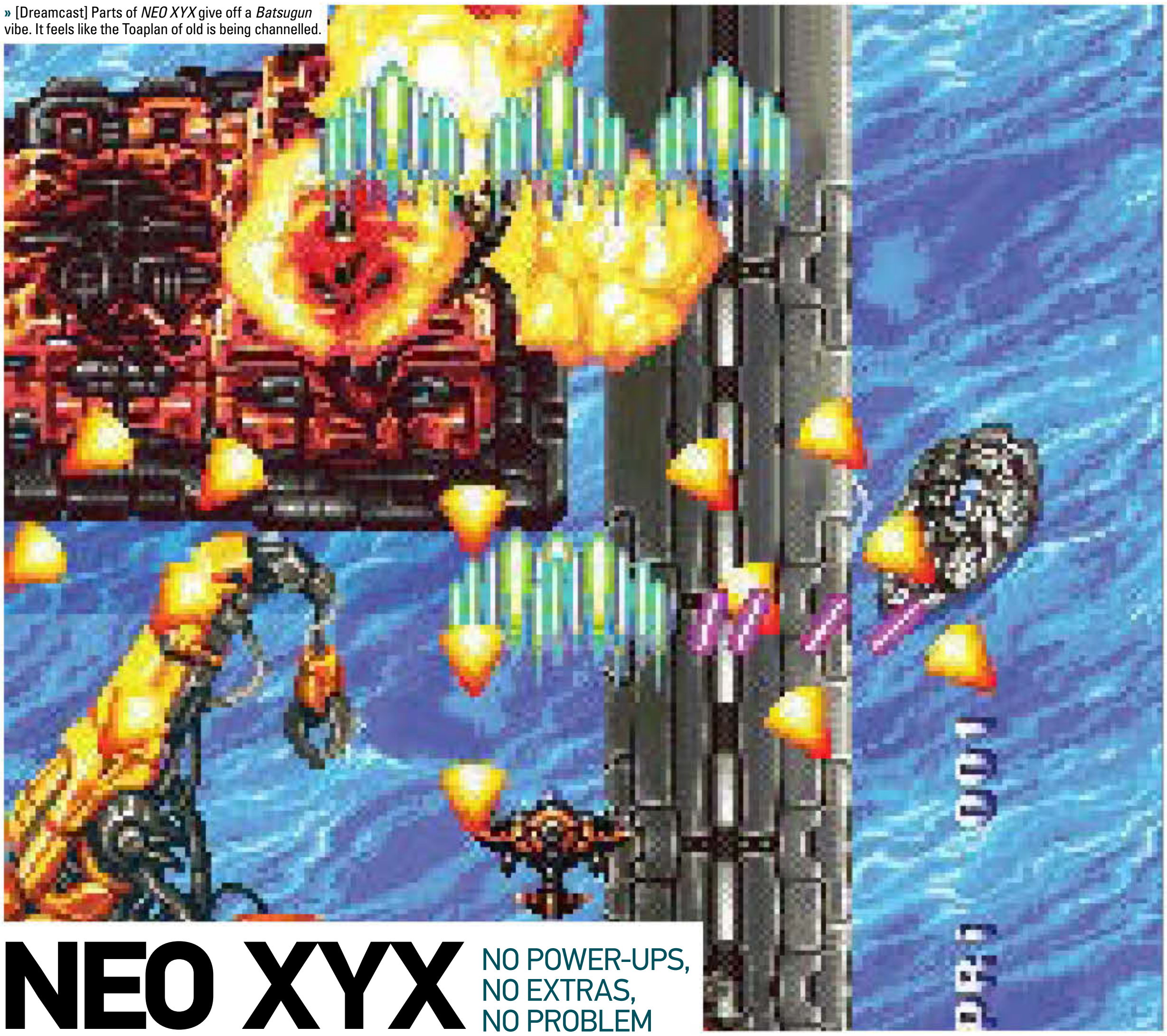
Full of character thanks to the charming looking Bobby, and boasting some fiendishly designed screens, *Bobby Bearing* stands the test of time well, with or without its exciting 'Curvispace 3D' effect. *





>> Last month we mentioned that TxK, Jeff Minter's amazing new Vita shooter was £39.99. It's actually £5.49, making it even better value for money. This month we look at NEO XYX and see if several classics have stood the test of time

» [Dreamcast] Parts of *NEO XYX* give off a *Batsugun* vibe. It feels like the Toaplan of old is being channelled.



NEO XYX

NO POWER-UPS, NO EXTRAS, NO PROBLEM

PICKS OF THE MONTH



DARRAN
The Pinball Arcade
High scores and Pro Mode are a strange omission, but this remains the best iteration yet.



NICK
Kirby Triple Deluxe
Yes it's not doing anything new (although the 3D is lovely) but that hasn't stopped my loving it.

INFORMATION

- » **FEATURED SYSTEM:** DREAMCAST
- » **ALSO AVAILABLE ON:** NEO GEO AES
- » **RELEASED:** OUT NOW
- » **PRICE:** 34 EUROS (49 EUROS LIMITED EDITION)
- » **PUBLISHER:** NG: DEV.TEAM
- » **DEVELOPER:** IN-HOUSE
- » **PLAYERS:** 1

BRIEF HISTORY

» NG.DEV.Team is a German developer that was formed in 2001 by Timm and René Hellwig. It has built itself a niche in the industry by catering to fans of the Neo Geo and Sega Dreamcast, typically releasing a game on SNK's console then porting it to Sega's machine.





NG: DEV.Team's shoot-'em-up back catalogue has been somewhat inconsistent. While *Fast Striker* was a highly enjoyable vertical shooter that did a good job of capturing the halcyon days of early bullet hell shmups, its horizontal shooter, *Last Hope*, and *Turrican* clone *Gunlord* were less impressive offerings. It would appear that vertical shooters are definitely the developer's strength, as *NEO XYX* proves to be a highly entertaining blaster that gives *Fast Striker* a great run for its money.

Perhaps the biggest success of *NEO XYX* is just how well it manages to captures the feel of classic Toaplan games from the late Eighties and early Nineties. The sprites are big and chunky, with gaudy looking bullets and colourful designs that instantly bring to mind out blasters like *Tatsujin*.

The environments are equally enticing to look at, and while they're abound with typical clichés of the genre, they remain crammed with detail, although they admittedly lack the sheer wow factor of *Sturmwind*'s incredible aesthetics. Interestingly, the bosses don't quite have the same splendour as the rest of *NEO XYX*'s enemies. Sure they're pleasingly large, often requiring to be dismantled in several parts, but they're fairly generic looking and lack the variety of the mayors found in *Sturmwind* and other DC shooters.

Fortunately, while the bosses are rather bland in their styling and design, NG: DEV.Team has made them surprisingly satisfying to fight against. Attack patterns throughout are of a very high standard, and while bullet patterns can sometimes feel a little unfair, a good eye and plentiful use of *NEO XYX*'s Slow mechanic





» [Dreamcast] Bombs don't only look amazing, but also juggle medals, giving you extra time to grab them.



» [Dreamcast] It's not true bullet hell, but boss fights will still test your reflexes to the limit.

> **"It's a system that works surprisingly well, with plenty of risk versus reward"**

does reap rewards. There's some inconsistency to the difficulty of the bosses and sub-bosses (later ones can be surprisingly easy to defeat compared to those found on the third level for example) but the challenge offered is otherwise good.

This in itself is an achievement, especially when you consider how barebones *NEO XYX* first appears to be. There are no different ships to collect and a complete lack of power-ups, initially giving the impression that NG: DEV.Team's game is lacking in depth. It soon proves to be a satisfying score chaser however, partly due to the Slow mechanic we've previously mentioned, allowing you to carefully pick your way through difficult patterns and its enjoyable scoring system.

Collecting medals sees them slowly increase in value and providing you don't miss any, your score will continue to climb. It's a system that works surprisingly well with plenty of risk versus reward, as you'll nip out to catch stray medals in the hope of sending your score into the stratosphere. A further nice touch is the ability to use your bombs to fling the medals back up the screen, allowing you to mop up those you might have otherwise missed. We found a few bottlenecks that made it insanely hard to keep your chain without resorting to a power-up, but for the most part the mechanic works extremely well and offers you plenty of replay value as you constantly try to beat your best score.

Due to the high intensity of the gameplay, you'll find yourself frequently emptying your available bombs as you get to grips with *NEO XYX*'s high difficulty curve. Additional bombs come in the form of fragments though, meaning you can always obtain more providing you pick up enough pieces. The Slow button is also insanely useful as your ship moves extremely fast, far faster than many other games in the genre. At first it feels too twitchy and out of control, but you soon realise that it allows you to nip into dangerous areas with ease. It helps that your hit box is tiny, but it is amazing how quickly you get used to the initially over-sensitive control system.

Less impressive are the reports we're hearing that *NEO XYX* isn't quite as polished as it first appears to be. It would seem that a few players have experienced freezes and other little niggles, particularly while playing with modded peripherals. We've not experienced any of these issues ourselves, although there is an annoying little pause at the beginning of each boss fight. Most of the issues appear to be situated within a single screen mode, and as most seasoned players will play in tate mode, many won't notice it anyway. They don't appear in the original MVS version, making the anomaly more than a little disappointing for DC owners.

Ultimately though, many will feel that the wait for *NEO XYX* has been worth it. While it's not the most imaginative shooter we've ever played, it does offer plenty of replay value and a robust scoring system. Yes the difficulty will irk some, but many will rise to the challenge and discover NG: DEV.Team's best game in the process.

In a nutshell

While it's lacking in originality, *NEO XYX* remains a tense, challenging shooter that easily captures the glory days of the genre. The fact that it feels like a classic Japanese shmup is probably the best compliment we can give it.

>> Score 80%

Dreamcast homebrew

Last Hope



NG.Dev.Team's first game in 2006 attempted to take on Irem's mighty *R-Type*. While it certainly looks nice, it's plagued by typical Euroshmup design mechanics and is best avoided. An improved update appeared in 2009 called *Last Hope: Pink Bullets* is the version to plump for.

Gunlord



A *Turrican* clone for the Dreamcast sounds amazing, but *Gunlord* never really lives up to its grand promise. It's an average shooter with some nice ideas, but is let down by bland level design and uninteresting power-ups and bosses. It does have some decent music mind.

Sturmwind



Duranik's shooter is one of the best Western shmups we've ever played and is a must-own for any fan of the genre. Released in 2013, it's a brilliantly paced shooter with amazing looking visuals and some stunning and imaginatively designed bosses. An essential purchase.

Rush Rush Rally Racing

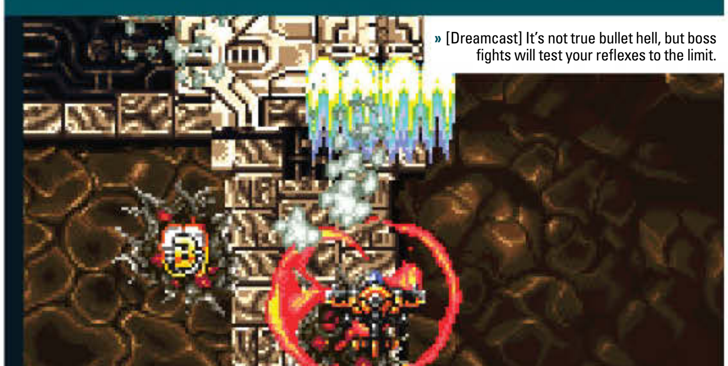


Not every Dreamcast homebrew release is a shoot-'em-up (although many of them are). *Rush Rush Rally Racing* is a fun top-down racer that calls to mind the likes of *Micro Machines* and *Nitro*. Like similar games it works best with friends and can get very, very competitive.

Dux 1.5



The original *Dux* looked lovely but suffered from a number of niggly issues that marred its design. This update, whilst still far from perfect, is a big improvement that proves developers can listen to feedback. A Kickstarted-funded enhanced sequel, *ReDux*, has just been released.



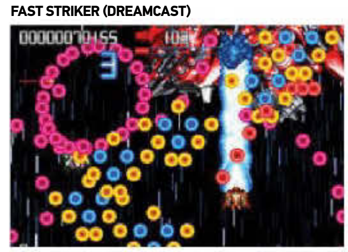
» [Dreamcast] It's not true bullet hell, but boss fights will test your reflexes to the limit.

✱WHY NOT TRY

▼ SOMETHING OLD
TATSUJIN (MEGA DRIVE)



▼ SOMETHING NEW
FAST STRIKER (DREAMCAST)



RETROROUND-UP

>> Every month we look at all the classics and latest releases that are available to buy or download



DOWNLOAD OF THE MONTH

INFORMATION
» **System:** PS4
» **Buy it for:** £39.99
» **Buy it from:** Online, retail



Pinball Arcade

We're big fans of *Pinball Arcade* so was greatly interested in seeing how the power of the PlayStation 4 would be harnessed. The end result is the best version of the game yet, and while it has a few little issues, it's arguably the most realistic alternative you can play without putting money into the real thing.

The PS4's grunt is being used mainly for two things, lighting and physics. Play the darkened versions of each table and the effect is magical, with beautiful lighting turning your TV into a mesmerising sea of colour. It looks incredibly realistic and is a huge improvement over previous last-gen versions.

It's the physics that really impress here though. Previous home console offerings have always been good, but everything has been ramped up dramatically for the PS4 outing. There's a lovely heft to the ball as it ricochets around the table. Add in the extremely responsive tilt system and it really can feel like you're shunting a proper machine around.

Another new addition that's currently exclusive to the retail release is a set of challenges that build upon the base options already found on each table. They're normally based around themes and get progressively harder on each table. You have a set number of credits to achieve each challenge, and it's frightening how quickly you can burn through them.

Less impressive however is the lack of online leaderboards, which is all the more baffling when you realise they currently feature on the digital version of the game. *Zen Pinball*'s online system works well, and it's a shame to see nothing of the same standard here, meaning you're relying on beating local scores. It's also odd why the price doesn't include the expensive Pro Mode for certain tables. A fix is on the way however for leaderboards, as is a tournament mode. It's not perfect, but it's the best version of the game that's currently available and a must for pinball fans and high score chasers.

88%

>> OTHER HIGHLIGHTS



South Park: The Stick Of Truth

» **System:** PS3 (tested) PC, Xbox 360
» **Buy it for:** £49.99
» **Buy it from:** Retail, PSN, Xbox Live, Steam

South Park is thrifty for an RPG, clocking in at around the 12-hour mark if you're not interested in completing its side quests. This is a good thing, for while it's possibly one of the funniest games we've ever played, it's a little sloppy as a RPG due to some clunky design choices during combat, it's overall easiness and a baffling menu system. It feels a little rough considering Obsidian's heritage. Still, you'll be laughing too much to care.

71%



Professor Layton Versus Phoenix Wright

» **System:** 3DS
» **Buy it for:** £34.99
» **Buy it from:** Online, retail, eShop

Two of the DS's most popular characters finally join forces and it's something we have no objection to. Crap jokes aside, this is an interesting collaboration, but one that doesn't gel as well as we'd like. It feels like two games spliced together and while the story is enjoyable, the switches between gameplay can feel a little jarring. There's no denying the fan service however.

74%



Resident Evil 4 Ultimate HD Edition

» **System:** PC
» **Buy it for:** £14.99
» **Buy it from:** Steam

Don't be fooled by its title, this isn't the ultimate version of Capcom's classic game. It's a very close thing though, nearly beating the Wii version (our favourite one). You get enhanced textures over the original HD console versions, making this the best official offering yet. The gameplay also benefits from the 60 fps lock (with the very occasional hiccup) making for a smooth, dynamic experience.

89%



Kirby Triple Deluxe

» **System:** 3DS
» **Buy it for:** £34.99
» **Buy it from:** Online, retail, eShop

You know where you are with a *Kirby* game and *Triple Deluxe* doesn't disappoint. The biggest difference to past games is Kirby's new Hypernova guise that allows him to suck up pretty much everything on-screen. Play switches between two planes (which looks great in 3D) while there are new copy abilities and mini-games. It remains a pushover difficulty wise, but this is still an entertaining platformer.

78%

Final Fantasy X/X-2 HD

» **System:** PS Vita (tested) PS3 » **Buy it for:** £34.99 » **Buy it from:** Online, retail, PSN

It's amazing how well *Final Fantasy X*'s grid system still holds up, delivering excellent turn-based combat that was subsequently greatly refined in *X-2*. The rearranged soundtrack is equally impressive, while Square has gone all out to ensure that *Final Fantasy X* looks absolutely stunning on the Vita's OLED screen.

Graphically it's incredibly swish, and while some minor characters and backgrounds look a little underdeveloped, there's no denying that it's a marked improvement on the original games - a genuine HD update.

The story and gameplay does feel slightly aged now – it doesn't seem to have stood the test of time as well as *VII* and *VIII* – and *X-2* still feels a little too silly, but the combat in both really does shine, while many of the boss battles remain extremely exhilarating. An excellent upgrade over the PS2 originals that fans will need in their collections.

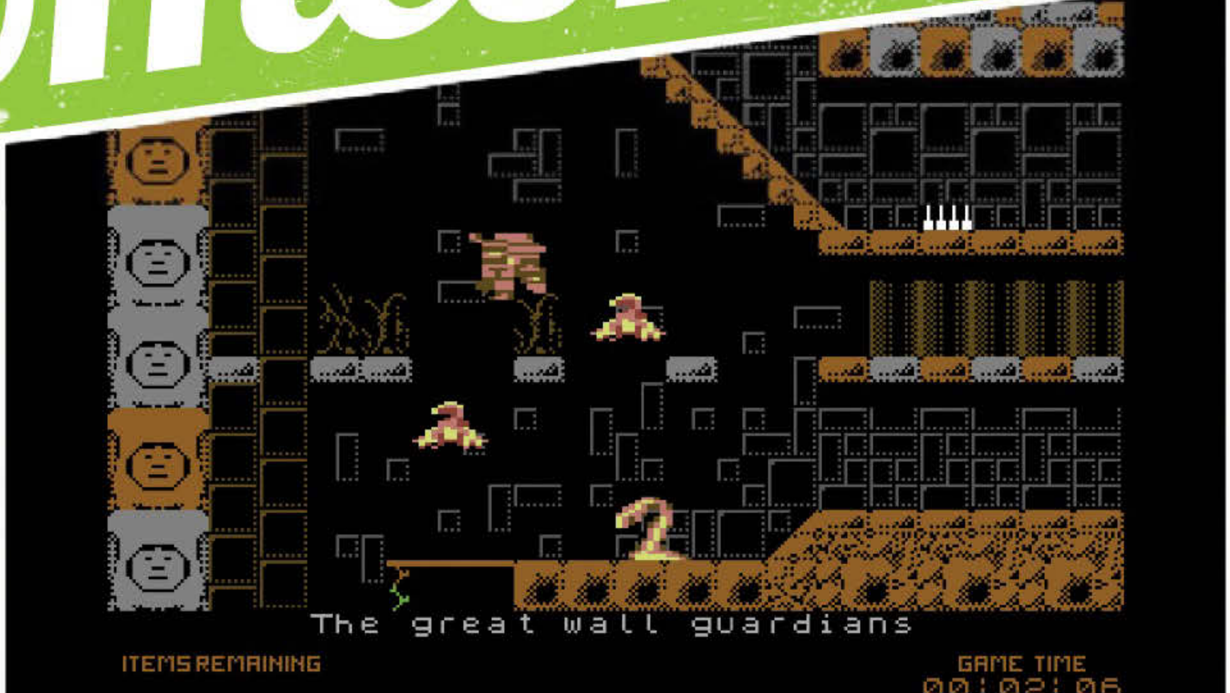
86%



Welcome to Homebrew



>> Hello and welcome to our fresh new look for Homebrew. We'll be slowly tweaking the style over the coming issues and looking at covering more varied games, so if there's anything you'd like to see write in at the usual address



» [C64] Returning to his spiritual home.

TEMPLE OF WHAT?

This Commodore 64 port is already starting to look very special

Back in the mists of time – or issue 86 just over three years ago to be more accurate – we looked at a Windows-flavoured indie game from Ovine By Design called *Rocky Memphis And The Temple Of Ophuxoff*.

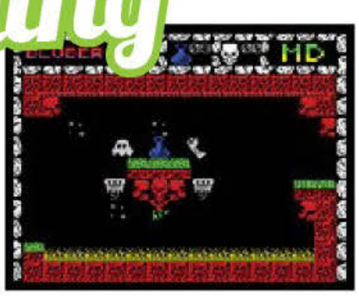
It boasted C64-inspired graphics throughout and took some of its inspiration from a range of 8- and 16-bit games including *Rick Dangerous* and the more recent C64 homebrew *Joe Gunn*, but instead of using traditional lives counter players were challenged to ransack thousands of treasures from a 600-room tomb against the clock with time penalties when they lost a life. The game was well received among indie gamers but the sheer size of the in-game map and the graphics having been drawn at twice the C64's multicolour resolution meant that a conversion was felt to be out of the question.

So we were more than a little surprised to learn that an Italian coder who works under the pseudonym Wanax has been beavering away at a C64 conversion. Since the original's graphics used the palette but weren't designed with the C64's limitations in mind, the process of converting them has obviously led to some of the visual finesse being lost but what has been shown so far still looks reasonable and we're hoping that there's going to be work done to improve things even further. One aspect that's absolutely spot on is the music, as the Windows version uses a real SID tune composed by Timo 'Abaddon' Taipalus – the author of cross-development music tool Cheese Cutter – and it has been adopted for the C64 port as well. The first playable preview is available online from the C64 Scene Database at Kikstart.eu/memphis-c64 and the Windows version is at Ovine's website Kikstart.eu/memphis.

> **"The process of converting the graphics has led to some finesse being lost"**

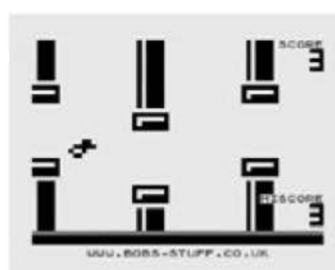
Incoming

This month we're rather excited about Pixel's Pulse, as it's an exciting looking shooter for the VIC-20



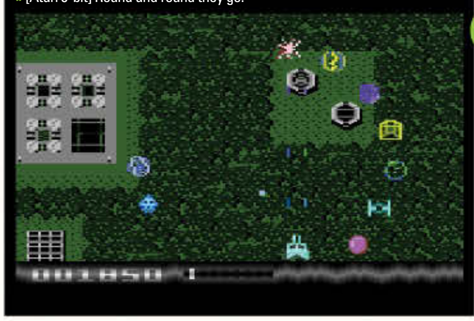
◀ Juan Carlos Montalban's *Bluber – The Last Odisey* is a platform collect-'em-up powered by the Mojon Twins' Churrera engine.

▶ Here are more birds of the flappy variety; Bob Smith's *Quack* is a rendition of that game for the ZX81! Kikstart.eu/quack-zx81.



NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at:
retrogamer@imagine-publishing.co.uk



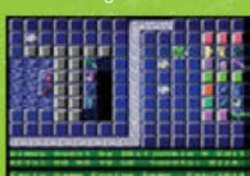
» [Atari 8-bit] Round and round they go.

TO INFINITY

One project we've been keeping an eye on for a while is seasoned Atari 8-bit developers Paul Lay and Harvey Kong Tin's vertically scrolling shoot-'em-up *Atari Blast*. Planned for release on the Atari 8-bit and 5200, this is shaping up to be a massive game using the majority of the machine's graphics modes for the levels. We played a disk-based preview that requires a 1Mb expanded Atari 8-bit, but the final game will come on cartridge – or as a cartridge image – which makes it accessible to Atarians running stock machines. Kikstart.eu/atari-blast-a8 leads to the Atari Age discussion.

SUGAR FOR MY HONEY

The yearly ABBUC software competition for Atari 8-bit computers hasn't officially been announced at the time of writing, but programmer Thomas Schulz is already letting people see screenshots of his entry *Dimo's Quest* which is a conversion of an Amiga game he wrote nearly 21 years ago. And from what we've seen so far on YouTube, the gameplay is similar to puzzlers like *Chip's Challenge*, with the player controlling Dimo the frog as he solves puzzles, unlocks doors and collects sweets. Hopefully the forum thread behind Kikstart.eu/dimo-a8 will be updated as work on the game continues.



» [Atari 8-bit] Dimo has a sweet tooth.



▲ The VIC-20 is somewhat bereft of scrolling shooters, so it's good to know that *Pulse* is coming soon. Kikstart.eu/pulse-vic.

Homebrew heroes



Dave Footit's long-awaited Retro Software release Mountain Panic appeared on our virtual doorstep recently, so we popped over to his place for a cuppa and a chat about grappling hooks

***Mountain Panic*'s setting is unusual, where did the idea come from?**
Initially I had to decide what sort of game to do with the BBC Micro's limited colour palette. Since it's got blue, cyan and white, I thought an icy theme would work well. A standout story for me with this setting was HP Lovecraft's *The Mountains Of Madness*, which I then based the game around. I'm also lucky enough to have some great artists as friends who offered to do the graphics (Chris Hogg and Roger Coe), without whom the game certainly wouldn't have had as much charm.

The grappling hook was a nice feature, how much does it shape the rest of the game?
Thanks! Originally I had the player starting with it, but I thought it would be nice if it came as a pick-up, with a couple of extensions along the way (especially since this was so cheap to implement in code). This very much shaped



» [BBC] A British summer.

how I designed the levels, to make sure certain platforms and rooms were accessible at the right time.

We remember seeing a reasonably complete preview in 2009, what actually delayed the final release?
That's an easy one – I had a couple of kids! Time became really scarce, especially time I felt like doing any coding. Additionally, as always with this sort of thing, demo builds tend to hide the amount of work left, so there was still much to be done at that time. Staying motivated was sometimes a



» [BBC] There's no business like snow business..

struggle, although I found people in the retro community a real inspiration and they helped me see the project through.

In hindsight, is there anything you would have perhaps done differently?
The first thing that comes to mind is I should have done a level editor. I edited the level structures by hand, which, while quite a retro approach, proved very time consuming. This also became frustrating later, where I ran out of memory and had to change the format of the levels.

Secondly, I'd written the game from scratch, with no real plan other than to get a game running. I think this approach made me over generous with memory usage. However, I was determined to make it run on an unexpanded 32K machine, so I found myself having to cut things out. Had I been more careful earlier, I might have had room for some of the other features I'd planned such as underground waterfalls and more items. But as they say, hindsight is a wonderful thing.

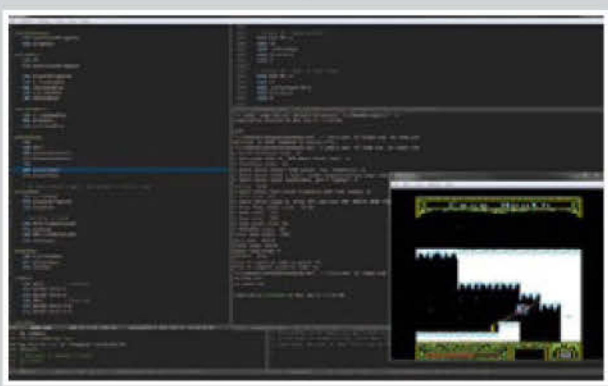
And finally, what are you planning to do next?
I'm currently putting the finishing touches to a simple text adventure. I'm also working on an iOS platformer called *Mr Kapoor* where you play a TV repair man. Later this year I'll probably start a new 8-bit title. I tend to work on whatever itch I feel needs scratching, but find it usually has a retro slant to it.



» [BBC] The colour for monsters…



» [BBC] J Arthur Rank would be very proud!



» [BBC] Worryingly neat source code.

FLAPPY BIRD

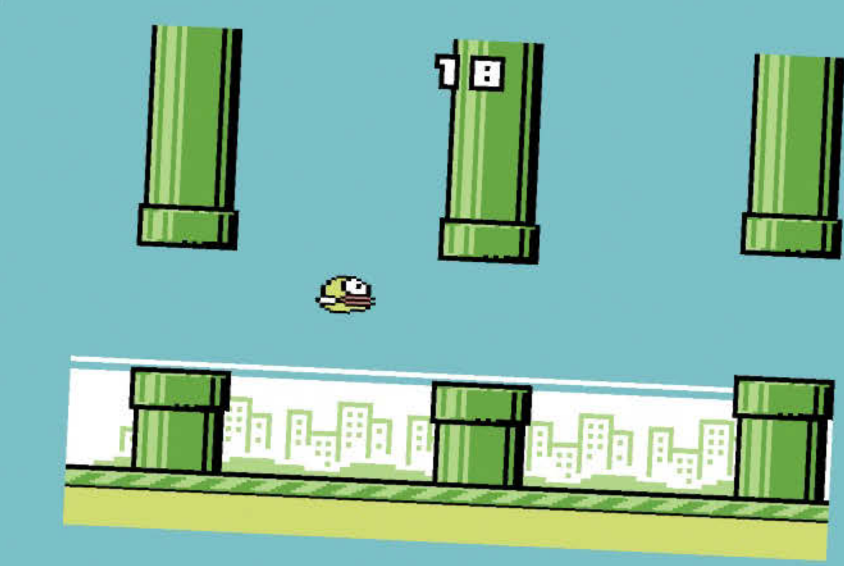
» **FORMAT:** COMMODORE 64 » **DEVELOPER:** SOS
» **DOWNLOAD:** KIKSTART.EU/FLAPPY-C64 » **PRICE:** FREE

It seems that everybody and his cat is cloning the recently redacted mobile game *Flappy Bird* at the moment – we recently came across a Flappy Jam competition which had just shy of 800 entries and the *Sesame Street* website has the difficult but funny *Flappy Bert*. Conversions to the classic platforms have taken a little longer to appear and, so far at least, this C64 conversion by multi-platform indie developer Sos is probably the closest we've seen to Dong Nguyen's iOS and Android original, both in how the game plays and the cosmetic details.

We'll just give a quick explanation for the one reader who hasn't already seen or played *Flappy Bird*; the titular bird must be guided safely through gaps in the large green pipes scrolling towards it. What makes things far more difficult is the control system which has the bird flapping its wings and thrusting upwards on any joystick input only to be dragged back down by gravity, so manoeuvring through the level takes quite a bit of timing as the player hops across the sky. Anybody now scratching their heads and finding that description familiar will likely be remembering the web-based *Copter Game* or one of the various clones that were doing the rounds about a decade ago and this is a very similar title apart from the control over Flappy being far more sensitive.

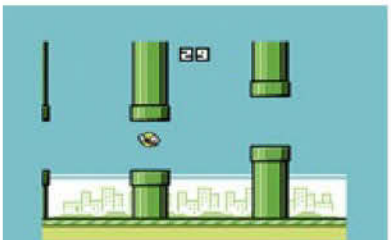
As far as the gameplay goes this is similar to the mobile title, although we can't help thinking that isn't necessarily a good thing since the original is frustrating and it's only been made marginally easier by the wider playfield on the C64 giving just a little extra reaction time. It still doesn't offer much variety since the gaps between pipes are a constant and there isn't any graphical variation, so the only reward on offer for getting further is a couple of extra points. In short bursts that's fun but it takes a degree of masochism or at least a high tolerance to frustration if players want to keep going for a longer session.

75%



» [C64] There aren't any plumbers in the pipes.

> "As far as the gameplay goes this is similar to the mobile title"


» [C64] Over the seas in all degrees.



» [C64] Don't forget to tweet your score.

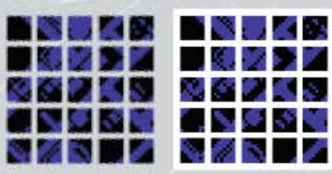
Make this

Every month our very own Jason Kelk will be teaching you handy new programming techniques. This month: Parallax Scrolling

NEW

1 There is a technique for producing easy parallax scrolling which works on pretty much any machine with redefinable characters like the Atari 8-bit or 5200 and the Commodore 8-bits from the VIC-20 onwards. Here's a screenshot of C64 shooter *Crush* with the hardware sprites removed.





2 And here's the background texture both blown up and spread out in order to show the 25 characters which repeat across the entire playfield; the regular scrolling moves everything on-screen from right to left so rolling the definitions of all of these characters left to right every second refresh creates the parallax effect.

3 With some thought and relatively little modification the same technique can be used for a number of different things including parallax-scrolling starfields, presentation effects like the moving texture on *Boulder Dash*'s title page or the moving background of *Fastboy* on the VIC-20.





4 By using multiple character sets which each contain differently pre-shifted background details it's possible to produce smooth scrolling on machines like the original MSX or Texas TI-99/4A where the hardware doesn't help out.

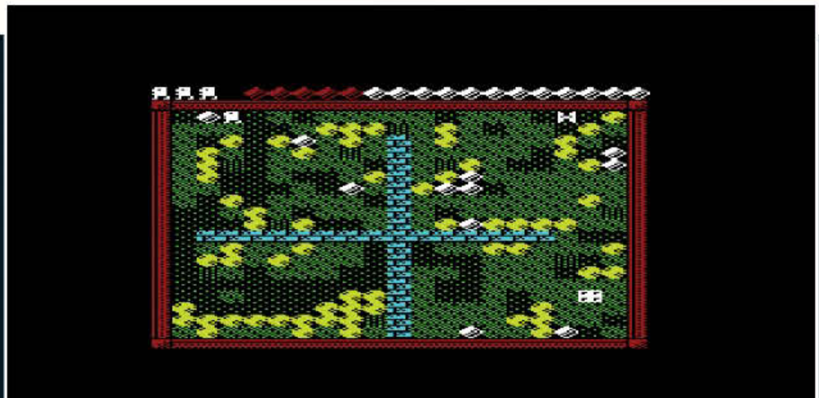
BOULDER DAN

» **FORMAT:** COMMODORE VIC-20 » **DEVELOPER:** MISFIT
» **DOWNLOAD:** KIKSTART.EU/BOULDER-VIC » **PRICE:** FREE

There are a couple of other *Boulder Dash*-style games available for the VIC-20, but *Boulder Dan* comes complete with a few tweaks to make it stand out a little. Unlike Rockford, Dan doesn't just dig through the ground immediately so situations where there's a boulder in vertical hot pursuit are more likely to end in rock-induced death. There's a quota of diamonds on each stage and sometimes they must be gathered after one of the cave's inhabitants ends up being squashed.

There's a reasonably gentle initial difficulty curve – unusual for this genre, both *Boulder Dash* and the clones like *Rockman* become devious quite soon after starting – and some clear, uncluttered graphics, but we did find the controls to be twitchy on occasion, usually when trying a difficult manoeuvre while being chased by a rock or a firefly. That doesn't detract much however and *Boulder Dan* is worth giving some attention.

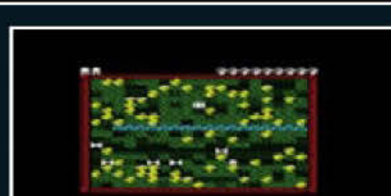
82%



» [Commodore VIC-20] You need to be bolder, Dan.



» [Commodore VIC-20] Time to dash.



» [Commodore VIC-20] Serenity.

ROAD HUNTER

» **FORMAT:** TEXAS TI-99/4A » **DEVELOPER:** RASMUS MOUSTGAARD
» **DOWNLOAD:** KIKSTART.EU/ROAD-HUNTER-TEXAS » **PRICE:** FREE

The inspiration for *Road Hunter* comes from Eighties coin-ops *Road Fighter* and *Spy Hunter*, but this isn't a direct clone of either and it instead picks and chooses elements. The objective is to drive through the levels while destroying as many other cars as possible and this can be done either by ramming them off the road – trickier than it sounds since those collisions bounce the player around too – or collecting a weapon and blasting them. Fuel can be topped up by collecting barrels.

Everything scrolls as smoothly as we've come to expect from Rasmus Moustgaard, with some detailed graphics and sprites, while sound is spot effects and a cover of the *Peter Gunn* theme which we're assuming is a nod to *Spy Hunter*. Staying on the road becomes more challenging as the game progresses, but not frustratingly so and *Road Hunter* is a solid piece of blasting.

88%



» [TI-99/4A] Beep, beep!

RETRO FEVER

» **FORMAT:** APPLE II » **DEVELOPER:** BRANDON BOGLE AND BRIAN PICCI » **DOWNLOAD:** KIKSTART.EU/ » **PRICE:** FREE

Just about anything is ripe for turning into a game and now there's finally an Apple II title about collecting old computers! So grab a joystick and head down to the virtual recycling centre to save a quota of Apple IIs from being nabbed by eBay sellers or dumped into the furnace. Some of these new machines are going to need attention at the workshop to bring them back to life and when they're operational you'll need to protect them from the sun's UV rays that threaten to yellow the plastic as you wait by the roadside for a lift.



» [Apple II] Dull my senses, steal my pride.

This is a no-nonsense action game with three distinct stages that are easy enough to begin with but rapidly become harder with each load of computers salvaged. The first stage is reminiscent of Brian Picci's previous release *Lamb Chops* but there's more overall variety that significantly increases the game's longevity.

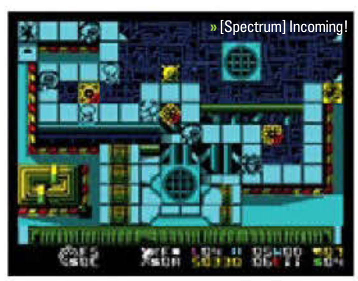
82%

CAPTAIN DREXX

» **FORMAT:** SINCLAIR SPECTRUM » **DEVELOPER:** HACKER VBI » **DOWNLOAD:** KIKSTART.EU/DREXX-SPEC » **PRICE:** FREE

Captain Drexx has been charged with stopping an invasion force single-handed! The attackers come through a hole in the outer defences and head towards his base in single file, but Drexx can't simply wade in all guns blazing and must purchase and position automated weapon towers at strategic points; there are four to choose from and each unit can be upgraded twice.

This is claimed by the author to be the first go at bringing tower defence to the Spectrum and it's a well thought-out attempt as well; the controls aren't immediately obvious but soon become second nature, towers can be placed and upgraded if the money is there while the game is paused to make working with keyboard controls viable and there's Kempston mouse support included as well.



» [Spectrum] Incoming!

86%

MAILBAG

HAVE YOUR SAY… SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!

Every month, one lucky writer-in will receive a copy of our latest eMag, **Retro Gamer Load 3**, a bargain if ever there was one





» [Master System] Homebrew games like *DARC* are a mystery to Tim Fitches – are other readers in the same boat?

HOMEBREW HELPERS

Dear **RG,**
I've been reading your mag – generally cover to cover – for three years now, but the one section I always skim over is Homebrew. Not because it isn't well written, but because I just don't… get it. The games all look great but I have literally no idea what steps I need to take to play them. What machine do I need? Do I need an emulator? How do I acquire one and is it legal?

The same goes for Watermelon's amazing looking Mega Drive game *Project Y* that you cover in issue 127. Sure I own a Mega Drive, but it's not as simple as that, right? How exactly do I purchase and play the game once it's available? I just feel a bit lost with this whole scene and I feel like I'm missing out on something special.

So, please, could you do an article explaining the ins and outs of homebrew that someone totally new like me could follow?
Tim Fitches

Homebrew can certainly be a minefield for a newcomer, and we'd imagine you're not the only reader out there that has never tried it. We've recently been talking about the idea of running some 'How To' articles and a beginner's guide to homebrew could certainly be part of that. As for *Project Y*, that's one release that shouldn't necessitate a guide – Watermelon's previous release *Pier Solar* was a regular cartridge that could be played in exactly the same way as any other Mega Drive game, and we don't foresee *Project Y* being any different.

TUNED OUT

Hi **RG**!
I have got some retro games consoles and I am having trouble connecting these to new televisions as they only have digital tuners. My consoles need an analogue tuner to work. Can you please do an article about this or let me know if you have any suggestions or tips?

I have found a device that solves this issue at Maplin, although it is expensive at £59.99. It's called the tvLINK Analogue to Digital Convertor. Perhaps you could tell other readers about this. If you know of any other solutions can you please let me know? Thank you.
David Ryder



» RF-only consoles can pose a challenge to owners of modern TVs, but there are ways to get them working.

We feel your pain on that front – Nick has just become the last of the team to upgrade to a modern LCD TV, having held out with a small CRT for as long as possible. There are a variety of methods that can be used to get analogue RF signals working on a modern TV – it's another good topic to cover in a 'How To' fashion.

STAR LETTER

NEW MODEL

Dear **Retro Gamer,**
The recent Elite Systems scandal has got me thinking – why do programmers of classic games need a middleman in the first place? After all, the model Elite was using was broken, given that the coders weren't getting the royalties they deserve.

So let's begin with a suggestion. Create a not-for-profit organisation that supplies emulated versions of the gaming classics which you can buy via download, a la Steam, or through an existing marketplace, which would provide gamers the chance to download these games onto their chosen platform. Once running costs have been paid for, all proceeds would then go to the programmers directly. But that wouldn't be all. When you download the game, you get all its versions. So if you've ever wanted to play Starquake on the Spectrum, Amstrad or even Tatung Einstein, you'd be able to select that version on the main menu.

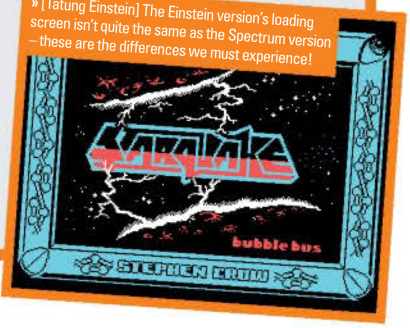
As an added incentive, you would also get high-res scans of the original packaging and design material, as well as magazine articles from the time of the game's original release, and even the equivalent of sleeve notes written by games journalists who know their classics in and out. This would mean you would not only be able to buy classic games but also be able to see them in context as historical artefacts.

Would it work? It's worth a try – more to the point, there are whole libraries of classic games that need and deserve access to new audiences and platforms. This proposal might not only give programmers the reward they deserve, but also do these classic games justice. It would, in any case, be worth a try…

Kind regards,
Alexander Hay

It's a wonderful vision of the ideal retro download service Alexander, and one we'd love to see realised. The main complicating factor we see is that of copyright. Some games would require rights to be negotiated with multiple developers or publishers, and that's before we even consider the bonus materials. Still, it's the kind of thinking we need to move on from this debacle, so have a prize on us.

» [Tatung Einstein] The Einstein version's loading screen isn't quite the same as the Spectrum version – these are the differences we must experience!



CHOCKS AWAY!

Dear **Retro Gamer,**
I was very pleased to see your article on *Knights Of The Sky*. This is a game I enjoyed back when it was released on the ST and though my Ataris are now long gone, thanks to the emulation I still play it from time to time. I'm using a laptop mainly – but have also managed to get it to run on my phone!

Your article reminded me that I had worn out a very nice QuickJoy Jet Fighter SV-126 joystick playing this game and it set me thinking that maybe I should get another one after all these years. A few minutes online and a few days wait and the stick was in my hands. Ironically this one suffering from exactly the same fire button failure as

Don't forget to follow us online for all the latest retro updates

RetroGamerUK @RetroGamer_Mag



CONTACT US

Snail Mail: Retro Gamer, Imagine Publishing, Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Email: retrogamer@imagine-publishing.co.uk

my original one! However, maybe I'm just better at fixing things nowadays as it didn't stay broken for long. I also built a nine-pin joystick to USB adapter so it could connect to my laptop.

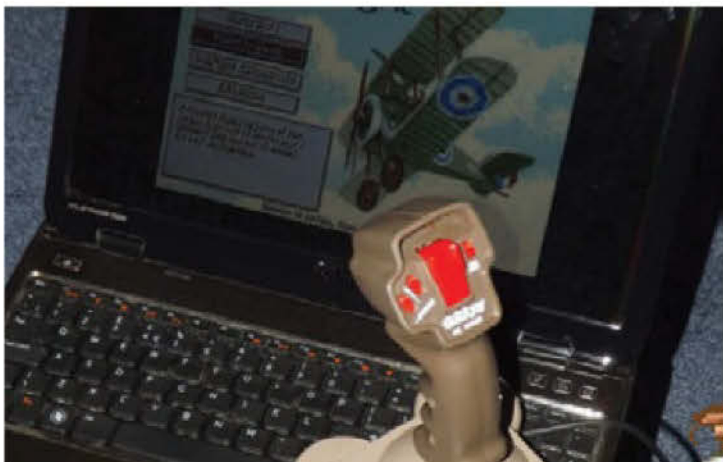
Remembering back, there was no head-to-head support – a pity as I was living in a house with a couple of other students also with Ataris and we had connected them with RS232 cables laid between the rooms! One of the popular ST magazines at the time had mentioned this head-to-head feature in their review and I remember writing to them when I realised it was missing.

Anyway, as well as retro gaming I still love a bit of combat flight simming and now play the WW1 flight simulator *Rise Of Flight*, networked across the house with my 11-year-old son.

Thanks for the great mag!

Steve Coffey

That's some excellent engineering, Roland! We're glad to hear that you enjoyed the feature.



» Roland's ingenuity has allowed him an authentic *Knights Of The Sky* experience on his laptop.

DISCUSSED THIS MONTH

Prepare for Titanfall

Darran's been bowled over by *Titanfall* this month, describing it as the most fun he's ever had with a first-person shooter. He even ended up buying an Xbox One to play it on his TV, and has been arranging Xbox Live sessions with Jon during tea breaks. Steve accused him of hypocrisy. Nick is waiting for the Master System port.







From the forum

» www.retrogamer.net/forum

Every month, **Retro Gamer** asks a question on the forum and prints the best replies. This month we wanted to know…

Your favourite scrolling beat-'em-up

Hiro
Golden Axe. It remains a masterpiece, with a great set of characters and enemies, well designed levels, excellent graphics and music. Some of the touches (the clouds, the hawk, the magic spells) are as spectacular now as they were in 1989. And I love to hit those gnomes!

ArchaicKoala
For me it would have to be *Streets Of Rage 3*. The additional moves, alternative endings and hidden characters made this superior to *Streets Of Rage 2*. I mean, who doesn't want to play as a boxing kangaroo?!

TwoHeadedBoy
Bucky O'Hare, perhaps? It's more of a shooter but designed as a beat-'em-up. Plus it 'concludes' the cartoon series, which is nice.

nakamura
Return Of Double Dragon on Super Famicom is my favourite. Get past those ugly graphics and there is a superbly deep combat engine in there with the excellent block and counter system.

merman
For laughs and giggles it has to be *Street Hassle* on the C64. A wrestler in shiny yellow pants beats up grannies, blind men, dogs and escaped gorillas with silly moves including the nipple twister and belly barge. Don't ban this sick filth!

ncf1
It's funny, I played so many after the original *Double Dragon* but could never find anything that surpassed it. There's just something about that game… I can't quite pinpoint it.

The Laird
It's impossible to look past the majesty of *Streets Of Rage 2*, as home console beat-'em-ups go nothing else comes close. If we are talking about arcade games though it just has to be Capcom's superb *Alien Vs Predator*.

Nemesis
An obvious answer to this question, but it has to be Capcom's seminal *Final Fight* for me. Huge sprites and iconic characters that have gone on to star in subsequent fighting games since.

Matt_B
I'd have to go for *Kung-Fu Master*, for being in at the beginning of the genre and remaining one of its exemplars.

ZeroCipher
It's an equal match between *Double Dragon*, *Streets Of Rage*, *Final Fight* and *Teenage Mutant Ninja Turtles* arcade.

retro GAMER

Imagine Publishing Ltd
Richmond House, 33 Richmond Hill,
Bournemouth, Dorset, BH2 6EZ
☎ +44 (0) 1202 586200
Web: www.imagine-publishing.co.uk
www.retrogamer.net
www.greatdigitalmags.com

Magazine team
Editor **Darran Jones**
retrogamer@imagine-publishing.co.uk
☎ 01202 586237
Editor in Chief **Nick Roberts**
Senior Designer **Jonathan Wells**
Staff Writer **Nick Thorpe**
Production Editor **Steve Holmes**
Photographer **James Sheppard**
Senior Art Editor **Andy Downes**
Head of Publishing **Aaron Asadi**
Head of Design **Ross Andrews**

Contributors
Luke Albigés, Mike Bevan, Richard Burton, Martyn Carroll, David Crookes, Paul Davies, Paul Drury, Kieren Hawken, Jason Kelk, Rory Milne

Cover Art
© Sega

Advertising
Digital or printed media packs are available on request
Advertising Director Matthew Balch
☎ 01202 586437
matthew.balch@imagine-publishing.co.uk
Head of Sales Hang Deretz
☎ 01202 586442
hang.deretz@imagine-publishing.co.uk
Account Manager Anthony Godsell
☎ 01202 586420
anthony.godsell@imagine-publishing.co.uk

International
Retro Gamer is available for licensing. Contact the International department to discuss partnership opportunities.
Head of International Licensing Cathy Blackman
☎ +44 (0) 1202 586401
licensing@imagine-publishing.co.uk

Subscriptions
Head of Subscriptions Gill Lambert
gill.lambert@imagine-publishing.co.uk
For all subscription enquiries
email retrogamer@servicehelpline.co.uk
☎ (UK) 0844 848 8412
☎ (Overseas) +44 1795 592 872
13 issue subscription UK – £51.90
13 issue subscription Europe – £70
13 issue subscription ROW – £80

Circulation
Head of Circulation Darren Pearce
☎ 01202 586200

Production
Production Director Jane Hawkins
☎ 01202 586200

Founders
Group Managing Director Damian Butt
Group Finance & Commercial Director Steven Boyd

Printing & Distribution
Printed by Wyndeham Heron Ltd, Bentalls Complex, Colchester Road, Heybridge, Maldon, Essex, CM9 4NW
☎ 01621 877 777

Distributed in the UK & Eire by: Seymour Distribution, 2 East Poultry Avenue, London, EC1A 9PT
☎ 020 7429 4000

Distributed in Australia by: Gordon & Gotch, Equinox Centre, 18 Rodborough Road, Frenchs Forest, NSW 2086
☎ +61 2 9972 8800

Distributed in the Rest of the World by: Marketforce, Blue Fin Building, 110 Southwark Street, London, SE1 0SU
☎ 0203 148 8105

ISSN 1742-3155

retro GAMER

nextmonth

» LOAD 129

ON SALE 22 MAY 2014

The Lynx Effect

As Atari's handheld turns 25 we look back at the impact it had and the coders keeping the machine alive





Escape From The Planet Of The Robot Monsters

■ As the cult favourite turns 25, we discover how Fifties B-movies inspired Atari's isometric arcade blaster

The Hardest Games Of All Time



■ From Ghosts 'N' Goblins to Dark Souls II. We investigate the games and genres that love to punish you while you play



Crazy Taxi

■ As Sega's cult franchise prepares to hit iOS, we speak to series creator Kenji Kanno about how it made some crazy money



Maze Games

■ Our latest bluffer's guide looks at how the likes of 3D Monster Maze and Pac-Man helped build the maze genre



Also Inside:

- Shinobi 3: Return Of The Ninja Master
- Mignight Resistance
- Panzer Dragoon Mini
- Ian Malcolm
- Heartland
- RJ Mical


DROPDEAD
THE 'CLASSICS' COLLECTION
SEGA
MEGA DRIVE
- FEATURING -
ECCO THE DOLPHIN
GOLDEN AXE
STREETS OF RAGE
The Drop Dead Classics Collection is inspired by and features the artwork of popular Sega™ games titles: Ecco The Dolphin™, Golden Axe™ and Streets Of Rage™. This unique boxed collectible collection is a must for anyone who grew up grasping a Mega Drive™ controller, playing through lives, levels and fearsome bosses.
WWW.DROPDEAD.CO

ENDGAME



TWISTED METAL WORLD TOUR

» Twisted Metal was one of the PlayStation's early hits, but was overshadowed by this sequel that did much to popularise the long-running series. After mowing down pedestrians, destroying all kinds of weird and wonderful vehicles and even blowing up the Eiffel Tower, the driver of your vehicle gets to meet Calypso

---



01

» Mike and Stu, the drivers of Hammerhead, have conquered all and won the Twisted Metal tournament. It's a great achievement, given that their vehicle has a crap special attack. They now dream of beaches, babes and farm animals.



02

» Calypso, the burnt-faced organizer of this vehicular slaughter, offers to grant the dim-witted duo a wish. They demand the ability to fly, a wish that Calypso is all too happy to grant with a rather theatrical burst of lightning.



03

» Our idiotic protagonists are overjoyed with this development and immediately run to the edge of the skyscraper, leaping off to defy death with their newly granted powers. Calypso looks on in disgust, thinly veiled as helplessness.



04

» As it turns out, that skyscraper leap was a bad decision. As they plummet towards the busy streets of New York, our plucky heroes can only question why they're not flying. It's the last question they ever get to ponder, as it's immediately followed by their fatal impact on the pavement.



05

» Calypso reveals his punchline – the first class plane tickets that would have enabled our heroes to fly, had they only exercised some patience. He's got a pretty sick sense of humour, but so would you if you were nicknamed after the ice lollies you had to press against your burnt face.



THE UK'S BIGGEST MODERN POPULAR CULTURE SHOW
MCMEXPO
Comics
Manga
Anime
Movies
Cosplay
Video Games
23-25 May 2014
Excel London
MCM LONDON
COMIC CON
MCM
eSports
A fantastic family day out - KIDS GO FREE*
ADVANCE PRIORITY ENTRY TICKETS AVAILABLE


AN EPIC ADVENTURE
"Across Age 2 is an awesome RPG experience"
9.5/10 Capsule Computers
ACROSS AGE II
Of Past, Present and Future
FDG
ENTERTAINMENT
Download on the
App Store
CXC
CREATE